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Automotive News

OCTOBER 14, 1991

66th YEAR

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late news

GM dealership opens in USSR

MOSCOW — The first General Motors-authorized dealership in Moscow is scheduled to open tomorrow, GM Europe announced.

Avtoimport has signed an agreement with GM's Germany-based Adam Opel AG to sell new Opel cars and parts and provide full customer service, said the company.

The company said the first shipment of new Opel cars and spare parts has arrived at the dealership, and Avtoimport has modified a workshop to meet Opel standards.

Avtoimport is the first of a number of GM Europe dealerships to be opened in the Soviet Union, said M.A. Razaq, regional director for Eastern Europe and export markets. He said an agreement has been signed for a dealership in St. Petersburg (formerly Leningrad), which will open in two months.

Fiat to get 51% stake in FSM

WARSAW, Poland — Fiat Auto S.p.A. said Friday it has signed a preliminary agreement to purchase 51 percent of Poland's

see LATE NEWS, 2

GM trusts its new engines

Buyer gets replacement if anything goes wrong

PHIL FRAME
Staff Reporter

Buyers of General Motors cars equipped with any of the company's new engines will get an all-new powerplant if anything goes wrong with internal components.

The engine exchange program began Oct. 1 and will run through the 1992 model year, said Mike Yuskowatz, technical coordinator for the Powertrain Division.

Engines that fail are being replaced rather than repaired because engineers want information on why the breakdowns occurred so any problems can be corrected, Yuskowatz said.

The engineers don't want dealership service technicians to work on internal engine components because it would affect failure data.

Technicians may service brackets, water pumps, vacuum tubes, starters, ignition system, sensors, accessory drives and several other exterior engine components.

But the cylinder case, cylinder head and gaskets, cam cover, oil pump, timing chain and all other internal components aren't to be removed, let alone serviced or replaced.

"We're trying to get more complete information on any problems that occur in the field so we get more timely corrections," Yuskowatz said. "If we see anything we need to fix across the board, we can do that a lot more quickly. It may cost us a little more initially, but we think it could reduce the incidence of comebacks."

The program covers five new GM engines:

- The 6.5-liter V-8 turbo-diesel used in two-wheel-drive versions of the three-quarter- and one-ton C/K pickups and chassis cabs sold by Chevrolet and GMC Truck.
- The supercharged 3800 or the 3.8-liter V-6 in the Oldsmobile Ninety Eight Touring Sedan, Buick Park Avenue Ultra and Pontiac Bonneville SSEi.
- The 3.4-liter "Twin Dual Cam V-6" available in the Chevrolet Lumina Z34 and Euro Sedan, all Pontiac Grand Frixs, and on all Oldsmobile Cutlass Supremes except the convertible.
- The 5.7-liter "LT1" V-8 on the Chevrolet Corvette.
- The 2.3-liter, 16-valve, single-overhead-camshaft "Quad OHC" in the Buick Skylark, Oldsmobile Achieva and Pontiac Grand Am.

The single limitation in the program involves the supercharged 3800 V-6. With that engine, the exchange policy is effective only for defects relating to the supercharger, which debuted on

see EXCHANGE, 41

Toyota unveils new high-performance sedan

Toyota last week introduced the Aristo in Japan, where it hopes to sell 3,500 a month. The new sedan, rumored to be a Cressida replacement, is powered by a twin-cam, 3.0-liter turbocharged inline six. It gives three of Toyota's five sales channels in Japan a luxury car. See story on Page 4.

Dealer survey: Program cars help

CHARLES M. THOMAS
Staff Reporter

Just two weeks before a National Automobile Dealers Association task force report on the nettlesome issue of program cars is due, an NADA Dealer Candidate Academy study shows an overwhelming percentage of dealers rely on program cars to keep them afloat in this sluggish economy.

Of dealers surveyed, 78 percent say program cars are helpful to dealers, 13 percent said they are not helpful and 9 percent were unsure.

The results don't surprise Richard Strauss, who serves on the task force and likely will be the next NADA president. He said most dealers concede that program cars have been helpful during this economic downturn. But the long-term effect on the franchise system should worry them.

"Program cars are a great sell today, but if they continue to come into the marketplace at current volumes, then the dealers who think they won't affect the franchise system over the long term have their heads in the sand," said Strauss, who owns Dick Strauss Ford-Isuzu-Suzuki in Richmond, Va.

"New cars and trucks are our core business," he said. "That's what we paid for to get our franchises, and not to sell used cars."

Among the dealers surveyed, 78 percent believe program cars steal new-car sales, and 22 percent said

see SURVEY, 43

GM exec hails program cars ➤ 29

Toyota exec bullish about Big 3 outlook

DAVID VERSICAL
National Editor

DETROIT — The Big 3 found an unlikely cheerleader on their home turf last week: the top strategic planner at Toyota Motor Sales U.S.A. Inc.

In a remarkable speech, George Borst, Toyota's vice president of strategic and product planning, predicted a rebound for the U.S. industry in 1992. And the Big 3, he said, will lead the way.

Sales will jump 1.5 million units to 14.2 million, Borst said. The Big 3, spurred by a wealth of new product, will collect 1.2 million of those sales, enough to earn an additional point of car market share and a half-point in trucks.

They were uncommonly genteel words from the top-selling Japanese brand in the United States.

George Borst says Big 3 will lead rebound in 1992.

Borst's boss, former Chrysler executive Robert McCurry, has held back few words when it comes to criticizing Detroit. But Borst, himself a former Chevrolet executive, said this is a "kinder, gentler Toyota for the 1990s."

No longer is Toyota saying, as it has for the past several years, that it intends to capture 1.5 million sales by mid-decade. And Borst dismissed suggestions that the new Camry has set out to wrest the U.S. car sales crown from the Honda Accord.

"We don't intend for the Camry

see TOYOTA, 41

Ford adds rebate to bargain Escort

KATHY JACKSON
Staff Reporter

Ford Division has changed its one-price Escort program to help its dealers keep more money in their pockets.

The division last week added a $500 customer rebate as part of the package, reducing by $500 the dealer financial participation needed to arrive at the $9,999 price for any LX model with manual transmission.

The company began a test program last month in certain parts of the country in which it advertises every Escort LX model with manual transmission for $9,999. The vehicles have air conditioning, power steering, AM/FM stereo and rear defroster.

The special price of $9,999 initially was derived from the $11,092 sticker for a comparably equipped LX three-door model in this manner: The option package carried a $593 discount, and the dealer subtracted $500 from his margin for a total of $1,093. Some dealers say they can make only $500 on an Escort, so Ford Division changed the formula to absorb the dealers' $500 contribution.

Ross Roberts, Ford Division general manager, said, "The company reduced the amount we make (on Escorts) by a considerable amount" to try to help make the program a success. "We didn't want any inhibitors to this program," Roberts said. "We have to be competitive and keep our dealers profitable." The program is

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U.S. parts group, Nissan at odds 3

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The 960 boasts Volvo's most potent car engine ever. PAGE 15

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BUBBLY RAGTOP

▲ Suzuki's tiny Cappuccino may rekindle sales. PAGE 27

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GM's John Rock says they buoy dealer profits. PAGE 29

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HANS G. LEHMANN/HIDDEN IMAGE

Isuzu prepares new Trooper

A replacement for Isuzu's Trooper sport-utility will debut late next year as a 1993 model. The new Trooper gains about eight inches in wheelbase and overall length, and features more rounded styling. Engines will include both four- and six-cylinders, with talk of a 4.2-liter V-8 due a year later. Both two- and four-door versions will be offered.

latenews

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state-owned Fabryka Samchodow Maloitrazowych, which has been producing Fiat 126 models under license since 1973.

The price is subject to an independent valuation of FSM's worth. But Fiat, which has already committed $500 million to build 160,000 of its new 500 microminis annually at FSM, said Friday it will invest $800 million more during the next six years.

Earlier this year, Fiat signed a preliminary agreement to buy 30 percent of VAZ, the Soviet, state-owned maker of Lada cars. That accord is valued at more than $1 billion.

Hyundai Excel prices rise $220 to $284

FOUNTAIN VALLEY, Calif. — Hyundai Motor America completed the pricing of its 1992 models by tacking increases of $185 to $284 on its Excel line. Earlier, the company announced hikes of $250 to $615 on the Sonata and $154 to $304 on the Scoupe.

The new Elantra sedans start at $8,995.

The base Excel three-door is $6,595 for 1992, up $220, and the GS hatchback is $7,599, up $254. Four-door sedan prices are $7,695 for the base and $8,499 for the GL. The base sedan is up $185, and the GL is up $284.

CAFE study may suggest 33 to 38 mpg by 2001

WASHINGTON — The Congressional Office of Technology Assessment is scheduled to issue its final report on fuel economy technology in time for a Senate debate on corporate average fuel economy that could begin Thursday.

The report is expected to produce three estimates of potential fuel economy. Under the "maximum feasible" scenario, a passenger-car CAFE of 38 mpg by 2001 would be possible if cost or consumer preference were not considered.

Another possibility assumes no new CAFE standards and gasoline at $1.50 a gallon. Under that view, CAFE could reach 33 mpg if consumers show increased interest in fuel economy and some new technology pans out. The other scenario says various government policies could produce CAFE gains somewhere between the other two figures.

The Senate is considering a measure that would require automakers to increase their CAFE scores 40 percent by 2001. The current standard is 27.5 mpg.

Volvo to offer bonuses to dealers

ORLANDO, Fla. — Volvo dealers will receive cash awards that are tied in part to customer satisfaction, as Infiniti Division already does and as BMW of North America plans to do.

Volvo Cars of North America's program offers dealers up to $1,500 per car sold. Payments will be made every six months and will be based on a formula that includes customer satisfaction, sales volume and — to a lesser extent — parts purchases.

Volvo reviewed its bonus plan with its 400 U.S. dealers in meetings here last week. Volvo dealers averaged about 220 car sales last year. At the maximum bonus level, those 220 sales would be worth $330,000.

Infiniti, the luxury division of Nissan Motor Corp. in U.S.A., said it gave 38 of its 89 dealers its maximum bonus of $25,000 for the first quarter of this year. Infiniti's payout is based on customer ratings of sales and service and evaluations by "mystery shoppers."

BMW is preparing a program that is more like Volvo's. It also takes sales volume goals into account.

U.S., Japanese makers talk trade in private

WASHINGTON — Representatives of U.S. and Japanese car manufacturers will meet in Tokyo next week for private talks about the U.S.-Japan automotive trade deficit.

Representatives of the Motor Vehicle Manufacturers Association and the Japan Automobile Manufacturers Association will meet Oct. 20 and 21. The sessions will take place at the same time as renewed discussions between government trade officials.

Last month, U.S. and Japanese negotiators agreed to study the barriers to sale of U.S. cars and auto parts in Japan.

Autolatina may market big German trucks

SAO PAULO, Brazil — German heavy-truck manufacturer Maschinenfabrik Ausburg-Nurnberg AG is negotiating to have Autolatina market its products. Autolatina is the holding company for Volkswagen and Ford interests in Brazil and Argentina.

S. Papke, the German company's export director for Latin America, told Brazilian financial daily *Gazeta Mercantil* that he will be in Brazil this month to sign the deal with Autolatina.

The trucks, with up to six axles and a cargo capacity of up to 150 tons, would form a new market segment in Brazil. Volvo, Scania and Mercedes-Benz now build Class 8 trucks here.

Delco Remy to build GM's electric motor

ANDERSON, Ind. — Delco Remy Division said last week that it will manufacture the propulsion motors for General Motors' electric vehicle.

In August, the division announced that it will make batteries for the GM electric at its Muncie, Ind., plant. In September, Hughes Aircraft Co., a GM subsidiary, opened a facility in Torrance, Calif., to make power electronics and charging systems for the electric vehicle.

The announcements mean GM has committed manufacturing facilities for the entire powertrain. GM previously announced that its electric vehicle, which it plans to build in the mid-1990s, will be assembled at the former Buick Reatta plant in Lansing, Mich.

The prototype propulsion unit is based on AC induction motor technology and features an integral gear reduction system, Delco Remy said.

briefly

Jerry Curry may fly again

Jerry Ralph Curry told a few people at an SAE meeting in Detroit recently that he was leaving the National Highway Traffic Safety Administration, but he didn't drop the other shoe. Maybe the Senate did. It confirmed Deputy Transportation Secretary Elaine Chao as the new head of the Peace Corps. Scuttlebutt says Federal Aviation Administration director James Busey will replace her, and Curry will replace Busey. Curry, a retired Army major general, has been a licensed pilot for 37 years, and he flew choppers and planes during two tours in Vietnam.

WINNER IS . . . NOT CHRYSLER — The Commerce Department last week handed its coveted Malcolm Baldrige National Quality Award to three small electronics companies, not **Chrysler Corp.** **Cadillac** had promoted its 1990 award heavily, and in January, Chrysler Corp. President Robert Lutz said Chrysler was preparing an application for the 1991 award that would encompass the entire corporation's "process redesign" of the way it conducts business. But Chrysler never entered. A spokesman last week declined to comment on why and when the company decided to drop the quest.

Robert Lutz: non-starter

VW FACES SHAME — Volkswagen AG board member Peter Frerk last week unveiled a granite memorial to slave laborers forced to build V-1 rockets for the company during World War II. Historians hired by **Volkswagen** decided that VW's boss then, Beetle inventor Ferdinand Porsche, went to Nazi Heinrich Himmler directly to recruit labor from the death camp at Auschwitz. Porsche was arrested but never tried for any war crime. He later founded the **Porsche** sports car company. His family says the five-year study was deceptive. Frerk said it would clear the record: "We owed it to the victims who suffered here."

CAFE BATTLE BREWS AGAIN — The auto industry's Coalition for Vehicle Choice has been advertising that higher corporate average fuel economy will mean smaller and more dangerous cars. Now the other side is speaking. The Communications Consortium is campaigning for higher CAFE standards, but with only a $50,000 budget, the consortium must depend on free advertising space and time to get its message out. In one TV spot, Ralph Nader recounts past opposition by carmakers to safety and fuel economy measures. It concludes, "Carmakers, don't slam the brakes on America — again." Don't look for it on TV, though.

MAZDA DEFIES CENSORS — **Mazda Motor of America** can expect some mail now that it has defied the American Family Association, the group that gave **Chrysler Corp.** a hard time for putting ads in *Playboy*. The conservative group describes NBC's "Saturday Night Live" as "tasteless, vulgar and offensive," and it asked Mazda to stop advertising on the show. Mazda wouldn't. So the Rev. Donald Wildmon sent copies of show scripts to about 350,000 followers and urged them to send postcards of protest to Mazda President Yoshinori Taura and local Mazda dealers. Stay tuned.

Parts group fights Nissan tariff break

LINDSAY CHAPPELL
Staff Reporter

NASHVILLE, Tenn. — Nissan Motor Manufacturing Corp. U.S.A. is close to building cars in Tennessee with enough North American content to be labeled "domestic," but a U.S. parts group says it isn't enough.

The break point for domestic classification is 75 percent. But the Automotive Parts and Accessories Association argues that more than half of the parts and materials going into U.S.-built Nissan Sentras and pickups are imported. The trade group has asked the U.S. government to reject or amend Nissan's application for greater tariff protection at its Smyrna, Tenn., plant.

The dispute arises as the U.S. parts community is pressuring Japanese automakers to increase purchases of U.S. parts.

The disagreement also brings to light some misconceptions surrounding the term "domestic content." Under the EPA rules that are used to separate cars into domestic and import fuel-economy fleets, manufacturers count such expenses as overhead and labor as well as actual parts to determine their North American content.

Under that formula, Nissan and other Japanese transplant makers are closing in on the 75 percent "domestic" threshold. And the transplants have cited the higher domestic content figures as evidence of their growing investment in the U.S. economy.

But Nissan concedes that despite its higher "domestic content" figure, imported parts still account for about 60 percent of its vehicles' parts content. And that, says the Automotive Parts and Accessories Association, is "disturbing."

The association, which represents about 800 U.S. suppliers, has objected to a Nissan application now before the Department of Commerce's Foreign Trade Zone Board. Nissan's current foreign trade zone status allows it to import parts duty-free for 240,000 cars and trucks annually. Nissan has asked for the same status for a plant expansion scheduled to boost capacity to 450,000 next year.

A foreign trade zone annual report, published late last year, indicates that Nissan imported $858 million in parts and materials in 1989, or 65 percent of total expenditures. It purchased about $471 million worth of goods from U.S. companies.

In its challenge to the application, the parts group claims that Nissan vowed in its original 1981 trade-zone application that imports would account for 60 percent of its parts and materials at the beginning of production in 1983, and eventually would drop to 40 percent.

The group called it "disturbing that after eight years of truck production and a 1985 expansion to assemble cars, (Nissan) has not met its lackluster long-term 60-percent goal, or even the scant 40 percent domestic sourcing level it pledged at the outset of production."

Nissan spokesman Bucky Kahl defended the firm's progress in sourcing U.S. parts and materials. He said that foreign purchases dropped to 60 percent in 1990 and will continue to decline.

"It doesn't seem fair to extract

see PARTS, 43

JOE WILSSENS/AN

Cleaning up

Willie Abney cleans windows at the $1 billion Chrysler Technology Center in preparation for the arrival of the platform design teams this week. Product design offices can be seen out the fourth-floor window. See story on Page 8.

GM dealers score with group buy

Texas associations pool ad funds

ARLENA SAWYERS
Staff Reporter

Members of General Motors dealer associations in southeast Texas set aside their competitive differences long enough to conduct a joint 10-day, $990,000 inventory reduction ad campaign.

Billed as the Texas Gulf Coast GM Dealers, 86 dealers representing 130 franchises and six GM divisions sold 3,047 new vehicles from Aug. 23 through Labor Day — a 47 percent improvement over the last 10 days of July.

Sales for the zones in which the dealers are located were collectively down 2.5 percent from the last 10 days of July.

It was the first time six GM dealer associations in the southeast Texas market joined forces in one advertising effort.

George DeMontrond, president of Houston's Buick ad association, said the dealers pooled their resources, giving them a bigger share of voice and a united front against import sales.

"The imports are very aggressive in our market," said DeMontrond, owner of DeMontrond Buick.

"Together, we had more to spend than any one association. We were extremely satisfied," he said.

The 28-member Buick association collectively increased its sales 62.5 percent over July.

Cadillac dealers increased their sales by 146.3 percent followed by GMC Truck dealers, up 90 percent; Chevrolet dealers, up 41.5 percent; Oldsmobile dealers, up 33.3 percent and Pontiac dealers, up 6 percent.

The associations paid for the program out of their ad association fees and matching funds contributed by their divisions.

Buick, Cadillac, Chevrolet, Oldsmobile and the joint Pontiac/GMC Truck association each kicked in $80,000. Added to that was another $200,000 in factory funds and about $300,000 spent by individual dealers.

Despite the success of the program, some dealers were not happy with its financial make-up.

James Masten, president of the 23-member Pontiac/GMC Truck association, said some dealers believe that since Chevrolet dominates the market, the Chevrolet group should have paid a higher percentage of the cost.

Joseph Pollaro, president of Pollaro Media Advertising & Productions, created the campaign and coordinated the effort with the groups and ad agencies. AN

NEW RECIPE

Reformulated gasoline can help cars meet new emission laws

JACK KEEBLER
Staff Reporter

The low-emissions alternative fuel of the future is gasoline — reformulated gasoline.

That is what automobile and oil interests are saying after completing research that examines the level of clean-up provided by chemically reformulating gasoline.

And although not fully convinced of reformulated gasoline's ability to provide the very best emissions levels, EPA and California Air Resources Board sources say they are open-minded about reformulated gasoline combined with advanced electrically heated catalytic converters.

Preliminary tests by the consortium, the EPA and the California Air Resources Board indicate vehicles powered by reformulated gasolines and using electrically heated catalysts might pollute the air no more than the best alternative-fuels vehicles powered by methanol, ethanol, propane or even natural gas.

"I firmly believe that this will be the case," said Joseph M. Colucci, head of General Motors' fuels and lubricants department. "I have stopped saying and thinking that we can't do it."

Bill Sessa, press secretary for the California Air Resources Board, said the level of clean-up described by Colucci for future gasoline-powered vehicles has not been determined.

"M85 (a fuel blend of 85 percent methanol and 15 percent gasoline) might still have an emissions advantage," Sessa said. "We're still looking at that. But there's no question that reformulated gasoline with an electrically heated catalyst will meet our '94, '95 and '96 standards.

"But given the different reactivity of exhaust from flex-fuel cars, the flex-fuel car might still have an environmental advantage. But that is not a firm conclusion."

When fuels experts refer to the reactivity of a particular fuel, they are talking about the propensity of the hydrocarbon part of the exhaust to photochemically react with oxides of nitrogen and sunlight to form ozone.

According to Steve Albu, branch chief for engineering studies at the California Air Resources Board, California has tested a Buick LeSabre and a Toyota Celica withelectrically heated catalysts on the federal test procedure.

And the results were impressive. The LeSabre with a V-6 produced 0.03 grams per mile of hydrocarbons, 0.34 gpm of carbon monoxide and 0.19 gpm of oxides of nitrogen. The four-cylinder Celica produced 0.03 gpm of hydrocarbons, 0.50 gpm of carbon monoxide and 0.07 gpm of oxides of nitrogen.

Electrically heated catalysts use battery power (3,000 to 5,000 watts), to preheat the catalyst for 10 to 15 seconds before engine start-up.

Engineers claim that up to 80 percent of the emissions recorded

see GASOLINE, 42

CLEAN AIR REGULATIONS THROUGH 1996

Table shows grams per mile allowed in automotive exhausts for each model year. California standards shown as a fleet average from some years.

	1992		1993		1994		1995		1996	
	U.S.	Calif.	U.S.	Calif.	U.S.	Calif.	U.S.	Calif	U.S.	Calif.
CO	3.40	7.00	3.40	5.56	3.40	3.769	3.40	3.400	3.40	3.400
NOx	1.00	0.40	1.00	0.40	0.40	0.400	0.40	0.400	0.40	0.400
HC	0.41	0.39	0.41	0.33	0.25	0.252	0.25	0.231	0.25	0.225

Source: EPA

Cunningham, Recchia on World Congress list

Theodor R. Cunningham, executive vice president of sales and marketing for Chrysler Corp., and Richard D. Recchia, executive vice president and chief operating officer for Mitsubishi Motor Sales of America Inc., will address the Automotive News World Congress on Monday morning, Jan. 13.

The 16th Automotive News World Congress will be held Jan. 12-15 at Detroit's Westin Hotel in conjunction with the North American International Auto Show.

Cunningham directs all activities of Chrysler's U.S. and Canadian sales, fleet and marketing organizations; Service and Parts Operations and the Pentastar Transportation Group. He was vice president of Service and Parts Operations before being appointed to his present post in November 1990.

Cunningham joined Chrysler in 1968 and became national sales manager in 1981. He was named general manager of U.S. automotive sales in October 1982.

In 1985, he was named general manager of Import Operations and vice president of sales and market-

Cunningham

Recchia

Registration information > 40

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service

SERVICE INDEX 95.4*

	Aug., '91 vs. Aug., '90	Jan.-Aug., '91 vs. Jan.-Aug., '90
Gross Profit on All Labor and P&A Sales	– 3.6%	1.2%
Repair Orders Written	– 0.6%	0%
Total Labor Sales (Customer & Warranty)	– 7.9%	– 0.1%
Shop Parts Sales (Customer & Warranty)	+ 1.4%	+ 2.6%
Sales of All P&A	– 3.4%	– 1.4%

* Survey by Automotive News shows that dealers' service and parts business in August 1991 was 95.4 percent of business in August 1990. Service business in the first eight months of 1991 was 98.9 percent of business in the corresponding period in 1990.

Service work declines

DETRO — New-car dealerships are still feeling the effects of the recession in the backshop as well as in the showroom.

Parts and service business in August was 95.4 percent of the total for August 1990, as measured by the Automotive News Service Index. It was the fourth consecutive month that business trailed the year-earlier total.

After eight months, service business was 98.9 percent of the figure for the same period in 1990.

Shop parts sales was the only indicator to post an increase for the month, rising 1.4 percent. Parts sales also was the only category to show a gain for the year.

The largest decline for August was in total labor sales, off 7.9 percent from a year earlier. Also taking hits were gross profit on all labor and parts sales, down 3.6 percent; sales of all parts and accessories, down 3.4 percent; and repair orders written, down 0.6 percent.

Figures used in the Automotive News Service Index are compiled from monthly reports on service and parts business from a cross-section of new-car dealers. AN

Toyota opens service center

KRISTINE STIVEN BREESE
Staff Reporter

TORRANCE, Calif. — Toyota Motor Sales U.S.A. Inc., which has been on a spending and building spree across the country this year, added another jewel to its crown this month when it dedicated a $25 million Service Development Center here.

Located across the street from the national headquarters for both Lexus and Toyota, the facility houses the company's diagnostic and product quality testing equipment. In addition, the center develops the curriculum used to train Toyota technicians and trade-school students.

The center occupies a 110,809-square-foot building on 4.3 acres of land.

Yuki Togo, Toyota president and chief executive officer, called the facility "a good example of Toyota's commitment to providing the best quality products and customer service in the industry." He stressed that the center will be vital in keeping technicians up to speed as Toyota products become safer, cleaner and more environmentally friendly.

To that end, the center routinely hosts service managers, administrators and technician instructors, who come to learn about the latest in Toyota product technology. They take that information back to dealerships and schools.

Also, Toyota will use the center to build expertise in areas once considered the sole purview of small service and repair facilities.

For example, Toyota expects that many small body shops won't be able to operate as cleanly as required by new environmental laws and still make a profit, forcing them to abandon that market.

So Toyota plans to take up the slack and take advantage of a key business opportunity. The company is putting more emphasis on teaching body repair techniques that are environmentally sound.

The center is responsible for at least four areas of Toyota's service activities, said Richard Gallio, vice president of parts and service for U.S. products.

The biggest is training and education. Some 8,100 technicians and almost 1,000 service-technician students around the country rely on curriculum provided by the center to work on Toyota products.

When a product is introduced or when new technology finds its way into any Toyota product, the center provides training support. That support varies; it can be as thorough as an in-house teaching session or as simple as sending new service guidelines to dealerships. The center produces six training videos each year.

Another activity is inspecting components from U.S.-based suppliers. That responsibility is shared by the center and Toyota's technical centers in Torrance, Calif., and Ann Arbor, Mich.

One of the biggest areas handled by the development center is evaluating accessories, such as bicycle racks, floor mats and center console cushions. "Things that they don't need or don't have in Japan, things that are more suited for this market," said John Shurtz, technical training program manager.

Working with everything from drill presses to computers, engineers and designers test and adapt accessory pieces to find the best ones to send to the ports or to dealers for installation.

Another area of the center is devoted to studying faulty parts returned by dealers. Particularly right after the introduction of a new product, dealers are asked to send in broken or weak parts discovered when servicing a customer's car.

Shurtz said it helps Toyota spot a problem and fix it before it gets out of hand. The parts are torn down and studied at the center, and reports are sent to Toyota engineers in California and Japan.

Finally, the service center is a dealer-technician support operation. Lexus and Toyota dealers can call the center via a toll-free telephone number, and questions are fielded by staff troubleshooters. AN

Center serves as base for technician program

KRISTINE STIVEN BREESE
Staff Reporter

TORRANCE, Calif. — To ensure that it will have an adequate pool of well-trained technicians to fill dealers' service bays in the future, Toyota continues to build its Technical Education Network (T-Ten) program.

With technicians in short supply, Toyota believes its commitment to T-Ten is well worth the cost. It spends $120,000 to $160,000 to establish a program and another $50,000 to $70,000 annually to support it.

Toyota boasts that 95 percent of the students who complete the two-year T-Ten program go on to work at Toyota dealerships.

Toyota recently dedicated a new $25 million Service Development Center near its Torrance, Calif., headquarters to serve as the "main campus" for the instructors who teach at the 62 schools that are T-Ten affiliates.

At least once a year, teachers will visit the Torrance facility to learn about curriculum changes and new models and to get a business update. Teachers meet more frequently at Toyota's 12 regional offices.

The center also will prepare videos and classroom literature that the teachers will use to keep students apprised of Toyota's technological developments.

Toyota began the program in 1986. From a pilot plan on 20 campuses, T-Ten now boasts nearly 1,000 students at 62 schools. In return for providing items such as parts, entire vehicles, diagnostic equipment and classroom materials, Toyota asks that each school set aside a specific area for T-Ten instruction.

The beauty of the system is its flexibility, according to several T-Ten instructors. Program directors and instructors from campuses across the country met recently for three days of instruction at the new center.

One recalled that General Motors wanted its facility used for training its technicians to remain empty when class was not in session.

Toyota, on the other hand, asked only that its area be exclusively Toyota's during class time.

Dennis Meyers, program chairman/instructor for automotive technology at Texas State Technical Institute in Waco, Texas, said his course may be nothing like the program offered by a colleague at another school, and that's the key to its success.

"We've got the flexibility to adapt the materials as needed. That means I can make it successful and make it fit the needs of my students," he said. "Every student I've turned out has gone with a Toyota dealership."

The program has been so successful that it has been adopted in Japan and expanded worldwide, said Mamoru Kaida, a Toyota Motor Corp. director who supervises worldwide service activities for the company outside the Japanese market. AN

GM testing specialty service program for dealers

PHIL FRAME
Staff Reporter

General Motors is launching a test program in Columbus, Ohio, aimed at the strengths of oil change, brake, muffler, tire and tune-up shops: convenience, cost, quality and trust.

Those factors now are what lead a GM car owner to visit a specialty shop rather than a GM dealer for routine service, said Richard J. Sherman, executive director of service marketing for GM's customer sales and service staff.

The Columbus program — called GM Goodwrench Service Plus — is designed to grab back the business lost to specialists. The participants are 14 of 22 Columbus-area GM dealerships representing all GM marketing divisions except Saturn.

"Convenience, cost, quality and trust are the four primary dimensions of owner behavior which we are influencing with our project in Columbus," Sherman said.

Participating dealers are dealing with convenience by extending service department hours to evenings and weekends; by conducting most service while customers wait; and by providing free transportation in cases when the service can't be done on the spot.

All of the dealers in the program are involved with GM's Quick Lube Plus program, which guarantees oil changes in 29 minutes or less.

GM Goodwrench Service Plus also incorporates the GM Quick Service Plus program, which guarantees quick completion of shock replacements, engine maintenance, brake inspections, front-end alignments, air conditioning service, radiator flush and fill, tire rotation and transmission service.

"The quick service portion of it only applies to those items where quick is important in the eyes of the customer," Sherman said. "You don't want quick brain surgery and you don't want quick brake service."

Cost competitiveness with the specialty shops is being considered on several levels, he said. "We'll address those issues with pricing strategies, as well as a lifetime parts and service guarantee for 10 categories of service."

Sherman's assistant, M.J. (Marty) Zwolan, said service and maintenance involving air conditioning, brake system, shocks/struts, front-wheel drive, lube/oil/filter, emission controls, fuel delivery, ignition system, cooling system and transmission will be covered by the guarantee.

JOE WILSSENS/AN

Goodwrench Service Plus makes it easier to get service at GM dealerships, says Richard Sherman.

The two major elements of cost — parts pricing and labor rates — also are being addressed, Sherman said.

Although declining to be too specific, Sherman said the labor rate strategy could be compared with a public relations agency, which charges hourly rates based on the experience and skill level of the employee needed to do a job properly.

Sherman also asserted that dealers already are in a position to buy parts at a rate that is competitive with specialty shops. Again declining to be more specific, Sherman said the retail price of parts depends on the degree of markup applied to a part as the dealer moves it from the parts department to the service department to the customer.

"That can be addressed," Sherman said.

David Reiss, market research director for the Motor and Equipment Manufacturers Association said he doubted whether dealers can compete in price with specialty shops and whether dealerships had enough capacity to handle a major increase in routine maintenance business.

Sherman responded: "To your doubting Thomases, we know absolutely we can be competitive."

One major component of GM Goodwrench Service Plus is training service writers, "establishing a different type of behavior at the service write-up area.

"That's why we're, among other things, going to a service menu, which addresses what we've determined to be the services most often sought outside of the dealer environment," Sherman said. "We will establish a competitive service and parts price that is inherent in that service menu. We also have trained and are training service advisors and technicians on how to operate more in a retail environment."

That may involve doing some diagnostic work as a matter of routine. For example, a technician may hook up a car to a hand-held diagnostic tester or to GM's Computerized Automotive Maintenance System while an oil change in being done to see if other service should be done beyond what the customer wanted.

GM Goodwrench Service Plus is the third step — after Quick Lube Plus and Quick Service Plus — in GM's attempt to help dealers boost their service business.

Other efforts are being planned, Sherman said, but the key now is to win the battle of Columbus. AN

Nissan readies continuously variable transmission

System designed for larger engines

RICHARD JOHNSON
Staff Reporter

TOKYO — Nissan Motor Co. is working on a continuously variable automatic transmission that it says could be fitted on cars with much larger displacement engines than existing production continuously variable transmissions.

Nissan engineers say its new toroidal traction system would permit shifting under all conditions for cars with engines displacing 3.0 liters and more. Until now, belt-drive continuously variable transmissions have been limited to smaller displacement because of the belt's limited power transmission abilities.

Although the company will display a mockup at the Tokyo auto show later this month, a production version is unlikely before the end of the century, said a Nissan spokesman.

"We are just in a stage of basic research," he said. "We don't see any commercialization soon."

The electronically controlled toroidal traction unit transmits power using the viscous shearing force of a thin lubricant film. Friction is reduced with a single set of cams.

A toroidal traction continuously variable transmission is not a new idea: General Motors experimented with it in the 1930s and Ford sought unsuccessfully to get the technology off the ground in the 1970s.

But Nissan engineers say that such barriers as poor viscosity of traction fluid, strength limitations for various parts and problems with synchronization control hampered past attempts to perfect the technology.

Nissan says its transmission uses disks and rollers and utilizes "superior materials" and high-performance traction fluid. The result, the company says, is smooth, stepless automatic shifting and improved fuel economy.

In a similar vein, Nissan says it helped Fuji Heavy Industries improve Fuji's electronically controlled continuously variable stepless automatic transmission for small displacement engines. The unit will appear first in a small Nissan car due early next year.

Earlier this year, Italy's Fiat Auto SpA said it was working on a "high torque" unit that could handle cars with engines larger than 2.0 liters.

That unit, also several years from production, is based on Fuji's electronically controlled continuously variable transmission unit.

Nissan announced that it plans to equip a new small car early next year with its N-CVT unit, a belt-drive continuously variable transmission developed with Fuji and derived from the electronically controlled version.

The new model wasn't announced, but is expected to be the Nissan March/Micra replacement due in 1992. Subaru's Justy successor is likely to share components with the March/Micra and to use the refined continuously variable transmission.

The unit is basically the same as Fuji's, which was introduced in 1987. But a spokesman said Nissan has made various improvements to the unit that yield better fuel efficiency and less noise.

Fuji will manufacture the N-CVT for Nissan, which declined to estimate production volume.

Nissan has a small equity stake in Fuji, the maker of Subaru cars and trucks, but has effective management control.

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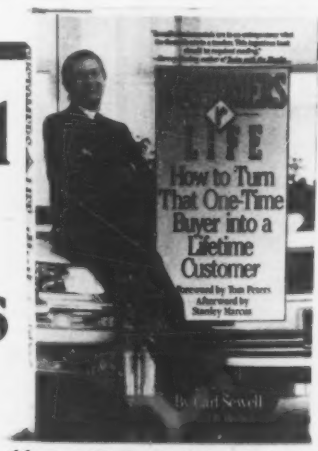

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Saturn dealers top 'em all in Sept. sales per outlet

KAREN DETKOWSKI
Statistician

Saturn Corp. topped the sales-per-dealer list in September for the first time, according to *Automotive News* calculations.

Toyota fell to third in September, behind Saturn and Honda. Toyota has held the top spot for overall car and truck sales four times since the introduction of the monthly sales-per-dealer calculation in April.

Saturn dealers reported a sales increase of 15.4 percent over August, which resulted in six more deliveries for each Saturn outlet.

Toyota reported a 27.8 percent decrease in car sales from the previous month and a 31.2 percent drop in trucks. Honda sales slipped 14.8 percent, but its dealers moved into second place.

Dealers contended with a selling period of only 24 days in September, the shortest selling period since last February.

Of 41 car and truck makes, 11 rose above August in sales per dealer and three remained constant.

Incentives to customers and dealers during a ferocious Ford-Chevrolet battle for model-year sales supremacy boosted September's average sales per franchise by six units for Ford and four units for Chevrolet. All of Ford's gain and most of Chevrolet's was in trucks. Ford has led in truck sales per dealer for five of the past six months.

Volvo sales fell to nine per dealer in September, down from 16 in August. Volvo reported its lowest sales of the year in September and its lowest September sales since 1981.

Volvo said it believes the car market is overheated as a result of almost two years of nearly continuous incentives and that consumers are confused by the variety of new products that debuted in September.

Volvo will introduce its 1992 line this month.

U.S. CAR AND LIGHT TRUCK SALES PER DEALER

Make	Car	Truck	Sept. Total	Aug. Total
Saturn	67	—	67	61
Honda	59	—	59	70
Toyota	40	17	57	80
Nissan	35	15	50	48
Ford	21	29	50	44
Lexus	50	—	50	50
Chevrolet	19	22	41	37
Acura	39	—	39	42
Infiniti	30	—	30	53
Mazda	17	12	28	40
Mitsubishi	23	5	28	31
Hyundai	25	—	25	29
Dodge	11	11	23	18
Buick	16	—	16	15
Isuzu	2	14	16	18
Subaru	15	—	15	11
Mercedes	13	—	13	12
Oldsmobile	12	1	13	13
BMW	13	—	13	14
Pontiac	11	1	12	13
Cadillac	12	—	12	10
Plymouth	7	4	11	11
VW	10	1	11	13
Mercury	10	—	10	12
GMC	—	10	10	11
Jeep	—	9	9	10
Lincoln	9	—	9	8
Volvo	9	—	9	16
Saab	7	—	7	8
Suzuki	2	4	6	6
Jaguar	5	—	5	9
Audi	4	—	4	2
Eagle	3	—	3	4
Range Rover	—	3	3	4
Peugeot	3	—	3	4
Daihatsu	2	1	3	3
Sterling	2	—	2	4
Chrysler	2	0	2	2
Yugo	2	—	2	2
Porsche	1	—	1	1
Alfa Romeo	1	—	1	2

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House bill promotes car recycling

WASHINGTON — A New Jersey Congressman has introduced a bill that would require a federal study of ways to promote recycling of the materials used in automobiles.

Robert Torricelli's bill calls for the EPA to convene a panel of experts to look for ways to promote recycling.

Members on this panel would come from the auto industry, private agencies, state and local governments, and auto dismantlers and recyclers.

The fifth-term Democrat said 10 million cars are scrapped each year in the United States. While the metal is recovered, 25 percent of the car's weight is discarded, most of it into landfills.

"If cars are designed properly from the very beginning, we could recycle about 95 percent of the materials used to build them," Torricelli said.

A particular concern is the number of different types of plastics that are used in increasing amounts in newer automobiles, Torricelli said.

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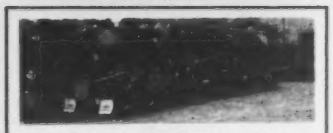

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Europeans drag down import sales

LINDSAY CHAPPELL
Staff Reporter

Declining sales for European lines darkened the overall picture for imported-car sales in the United States last month.

September sales of imported cars fell 5.35 percent below the year-ago month.

Still, the performance was better than the combined import and domestic car market, which slid 14.2 percent.

Japanese lines saw a bit of improvement in September, and Korean cars held steady. But the Europeans — led by Volkswagen and Volvo — continued a sales slide that has eaten away 18 percent of their volume so far this year. The September dip was 27.5 percent.

Volvo suffered a 57 percent sales drop for the month, most of it due to a sharp drop in sales of its 700-series cars. The monthly results, which the company blamed on industry incentive practices and a wide array of competing new-model introductions, represent the worst sales month for Volvo line since 1981.

Volkswagen's 34 percent setback was due mostly to a decline in Jetta sales, its highest-volume car.

Ironically, two exceptions to the trend were two companies leaving the market: Sterling (up 0.35 percent) and Peugeot (up 66.3 percent). AN

IMPORTED CAR SALES, SEPTEMBER & YTD

	Sept. 1991	Sept. 1990	9 Mos., 1991	9 Mos., 1990
Integra	4,755	7,144	52,594	66,521
Legend	5,418	3,804	47,289	42,165
NSX	112	220	1,677	265
Vigor	1,312	0	7,766	0
ACURA	**11,597**	**11,168**	**109,326**	**108,951**
Milano	1	3	4	42
Spider	62	122	1,161	1,603
164	156	260	1,726	972
ALFA ROMEO	**219**	**385**	**2,891**	**2,617**
ASTON MARTIN*	**5**	**5**	**45**	**45**
4000	0	0	0	1
5000	0	1	0	12
80	143	496	1,422	3,718
90	37	335	825	2,700
V8 Quattro	46	208	370	1,422
Coupe Quattro	21	78	233	704
100/200	843	1,225	5,465	7,134
100/200 Quattro	104	164	725	1,313
AUDI	**1,194**	**2,507**	**9,048**	**17,804**
3 series	2,487	2,467	19,602	22,345
5 series	1,315	1,303	13,087	15,974
635 CSi	1	5	7	229
7 series	730	1,268	4,113	7,117
850i	65	1	1,260	1
M3	11	57	307	601
M5	34	47	298	291
M6	0	0	0	6
BMW	**4,643**	**5,148**	**38,574**	**46,584**
Geo Storm	6,410	3,237	65,080	72,295
Geo Metro (import)	1,039	5,685	10,355	36,725
Geo Metro (Domestic)	*8,297*	*5,863*	*53,942*	*26,898*
CHEVROLET/GEO	**7,449**	**8,922**	**75,435**	**109,020**
Colt	2,981	4,144	22,401	29,824
Conquest	0	0	0	896
Medallion	0	0	0	475
Stealth	1,413	0	14,210	0
Summit (Import)	916	1,005	6,447	10,859
Summit (Domestic)	*1,035*	*0*	*6,327*	*0*
Vista	1,030	319	6,547	3,840
TC	214	214	1,077	2,792
CHRYSLER MOTORS	**6,554**	**5,682**	**50,682**	**48,686**
DAIHATSU	**497**	**914**	**4,859**	**6,721**
FERRARI*	**80**	**80**	**720**	**720**
FORD Festiva	**3,146**	**4,155**	**28,234**	**43,532**
Civic/CRX (Import)	5,469	9,512	53,752	54,382
Civic.(Domestic)	*17,800*	*10,612*	*123,616*	*150,520*
Accord (Import)	5,665	2,894	57,521	95,927
Accord (Domestic)	*26,829*	*27,366*	*252,542*	*214,993*
Prelude	2,336	889	19,855	31,176
HONDA	**13,478**	**13,295**	**131,128**	**181,485**
Excel	8,099	7,823	53,727	79,450
Sonata	1,895	1,832	17,582	23,626
Scoupe	2,020	650	22,557	650
HYUNDAI*	**12,014**	**10,305**	**93,866**	**103,726**
M30	802	1,142	5,338	6,094
Q45	731	622	12,031	8,979
G20	1,224	282	11,220	282
INFINITI	**2,757**	**2,046**	**28,589**	**15,355**
I-Mark	6	75	89	1,165
Impulse	209	252	2,672	1,744
Stylus	781	326	7,543	377
ISUZU	**996**	**653**	**10,304**	**3,286**
XJ6	548	1,368	5,085	10,509
XJS	183	354	2,058	3,582
JAGUAR	**731**	**1,722**	**7,143**	**14,091**
LAMBORGHINI*	**13**	**13**	**117**	**117**
ES250/ES300	1,586	1,682	13,139	15,309
LS400	3,437	3,586	28,494	30,105
SC400	1,148	0	5,638	0
LEXUS	**6,171**	**5,268**	**47,271**	**45,414**
LOTUS*	**27**	**27**	**243**	**243**
MASERATI*	**20**	**20**	**180**	**180**
323	1,240	1,847	14,288	17,493
Protege	5,524	3,288	41,082	35,702
626 (Import)	410	881	10,933	17,938
626 (Domestic)	*3,945*	*3,916*	*46,021*	*33,946*
MX-6 (Import)	122	26	1,512	166
MX-6 (Domestic)	*703*	*1,808*	*18,632*	*23,105*
Miata	1,789	2,393	27,272	28,606
929	480	1,621	10,601	12,985
RX-7	605	841	6,027	8,059
MAZDA	**10,170**	**10,897**	**111,715**	**120,949**
190	1,265	1,457	10,664	10,293
300E 2.6/260E	373	154	3,315	1,831
300	1,504	2,216	10,273	18,094
300SE	284	395	3,029	4,722
350SDL Turbo	97	161	1,057	796
350SD	131	64	1,229	84
300SEL	78	284	970	2,765
400SE	10	0	10	0
420SEL	491	426	3,868	4,780
500SEL	42	0	42	0
560SEL	343	320	2,275	3,354
SL Coupe	586	937	5,884	6,539
560SEC	42	108	488	1,279
Tourist	112	215	507	1,191
MERCEDES	**5,358**	**6,737**	**43,611**	**55,728**
Tracer	4,425	4,598	34,461	21,956
Capri	1,251	1,154	15,117	4,142
XR4Ti	0	0	0	198
Scorpio	0	0	0	2,424
MERCURY	**5,676**	**5,752**	**49,578**	**28,720**
Starion	0	0	0	18
Diamante	1,542	0	10,093	0
Mirage (Import)	641	3,074	16,334	41,241
Mirage (Domestic)	*1,057*	*1*	*15,363*	*32*
Galant	2,990	2,005	27,798	33,590
Sigma	3	28	145	1,477
Precis	351	517	2,140	3,815
3000GT	759	10	9,058	25
Expo LRV	381	0	535	0
Expo	534	0	789	0
Wagon	10	72	197	1,020
MITSUBISHI	**7,211**	**5,706**	**67,089**	**81,186**
Sentra (Import)	3,653	2,108	22,952	44,580
Sentra (Domestic)	*9,767*	*12,544*	*90,260*	*81,034*
Pulsar	1	88	33	3,798
NX	958	0	5,819	0
Stanza	9,596	9,993	59,301	64,544
Maxima	9,644	7,858	77,663	75,552
240SX/200SX	2,828	5,570	25,581	43,053
300ZX	1,729	2,027	11,615	16,877
Hawaii	230	235	1,971	2,589
NISSAN	**28,639**	**27,879**	**204,935**	**250,993**
PEUGEOT	**444**	**267**	**3,263**	**3,339**
PONTIAC LeMans	**2,895**	**3,647**	**28,662**	**34,002**
944S/Cabriolet	62	210	747	1,869
944 Turbo	0	2	0	463
911 Carrera 2	151	226	1,582	2,656
911 Turbo	29	0	352	8
911 Carrera 4	84	82	596	1,448
928S/GT	18	37	217	471
PORSCHE	**344**	**559**	**3,494**	**7,089**
ROLLS/BENTLEY*	**22**	**100**	**544**	**850**
900	390	231	3,716	3,709
900S	767	272	5,444	4,945
900 Turbo	449	307	3,951	5,389
9000S	197	88	3,365	1,695
9000CD	250	291	2,451	2,475
9000 Turbo	164	201	1,714	2,319
Tourist	9	11	84	136
SAAB	**2,226**	**1,401**	**20,725**	**20,668**
STERLING	**283**	**282**	**2,641**	**3,138**
Legacy (Import)	1,156	257	13,707	38,709
Legacy (Domestic)	*6,010*	*1,640*	*40,207*	*8,866*
Loyale	2,357	6,865	23,210	23,417
XT/XT6	46	103	1,387	1,040
Justy	534	1,261	5,474	11,334
SVX	352	0	616	0
SUBARU	**4,445**	**8,550**	**44,130**	**74,500**
SUZUKI	**527**	**835**	**3,598**	**5,193**
Corolla (Import)	2,692	6,062	43,163	67,898
Corolla (Domestic)	*11,002*	*7,882*	*102,261*	*104,314*
Paseo	2,957	0	14,472	0
Tercel	7,198	4,452	80,310	69,813
Celica	3,935	5,623	50,203	62,364
Supra	372	416	2,887	5,257
Camry (Import)	9,608	5,668	48,397	53,099
Camry (Domestic)	*8,265*	*14,380*	*149,769*	*163,031*
Cressida	970	1,433	7,743	9,301
MR2	571	1,089	7,975	11,021
TOYOTA	**28,303**	**24,743**	**255,150**	**278,753**
Cabriolet	399	562	4,684	6,438
Corrado	131	519	3,529	4,268
Jetta	3,360	5,450	30,985	48,205
Golf/GTI	1,389	1,904	11,452	13,674
Passat	1,383	1,360	12,772	11,526
Quantum	0	2	2	30
Scirocco	0	0	0	12
Fox	796	1,566	10,295	18,891
VOLKSWAGEN	**7,458**	**11,363**	**73,719**	**103,053**
240 series	1,271	2,896	19,009	26,542
700 series	1,401	5,175	24,175	46,175
940 series	757	0	11,234	0
Tourist	26	48	394	889
VOLVO•	**3,455**	**8,119**	**54,812**	**73,606**
YUGO	**332**	**366**	**2,158**	**5,102**
IMPORT TOTAL	**179,371**	**189,518**	**1,688,571**	**1,896,646**

*Estimate • Includes units produced in Canada NOTE: Domestic cars not included in imported totals.

Compiled by Karen Delkowski

CANADIAN CAR AND TRUCK SALES

SEPTEMBER 1991

	Sept. 1991	Sept. 1990	9 mos. 1991	9 mos. 1990
BMW (imported car)	**402**	**390**	**3,337**	**3,820**
N.A. Car	6,847	6,492	75,144	80,592
Imported Car	1,389	1,258	14,656	11,999
N.A. Truck	7,024	5,706	74,447	68,938
Imported Truck	124	132	1,082	1,325
CHRYSLER	**15,384**	**13,588**	**165,329**	**162,854**
N.A. Car	12,980	10,191	112,799	119,075
Imported Car	422	557	5,510	5,013
N.A. Truck	8,156	8,924	78,243	96,635
FORD	**21,558**	**19,672**	**196,552**	**220,723**
N.A. Car	20,988	19,086	228,929	231,968
Imported Car*	552	679	5,769	4,600
N.A. Truck	11,833	9,036	109,253	114,589
Imported Truck	234	311	2,835	3,026
GM	**33,607**	**29,112**	**346,786**	**354,183**
N.A. Car	3,255	3,958	21,252	28,328
Imported Car	6,125	4,925	62,912	51,447
HONDA	**9,380**	**8,883**	**84,164**	**79,775**
N.A. Car	502	796	4,219	4,879
Imported Car	1,288	1,212	13,077	12,710
HYUNDAI	**1,790**	**2,008**	**17,296**	**17,589**
JAGUAR (imported car)	**70**	**82**	**559**	**847**
Imported Car	96	63	447	508
Imported Truck	18	41	132	165
LADA	**114**	**104**	**579**	**673**
LAND ROVER (imported truck)	**13**	**6**	**109**	**27**
N.A. Car	266	361	5,037	3,343
Imported Car	2,371	1,611	23,426	21,090
Truck**	1,638	1,668	17,360	14,939
MAZDA	**4,275**	**3,640**	**45,823**	**39,372**
MERCEDES-BENZ (imported car)	**278**	**342**	**2,678**	**3,192**
N.A. Car	815	40	7,115	40
Imported Car	1,901	1,287	16,872	18,613
Truck**	1,104	888	9,825	11,127
NISSAN	**3,820**	**2,215**	**33,812**	**29,780**
PEUGEOT (imported car)	**15**	**7**	**132**	**86**
SUBARU (imported car)	**619**	**617**	**6,445**	**5,709**
N.A. Car	105	42	1,129	308
Imported Car	670	345	4,235	5,734
N.A. Truck	307	131	2,897	1,443
Imported Truck	368	206	3,206	4,227
SUZUKI	**1,450**	**724**	**11,467**	**11,712**
N.A. Car	1,061	1,944	16,052	9,531
Imported Car	4,272	5,244	41,616	51,422
Imported Truck	1,431	1,416	15,470	13,485
TOYOTA	**6,764**	**8,604**	**73,138**	**74,438**
Imported Car	2,517	2,604	26,344	26,705
Imported Truck	86	34	732	767
VOLKSWAGEN	**2,603**	**2,638**	**27,076**	**27,472**
N.A. Car	93	411	1,294	2,655
Imported Car	223	224	2,131	1,888
VOLVO	**316**	**635**	**3,425**	**4,543**
N.A. Car	**46,912**	**43,321**	**472,970**	**480,719**
Imported Car	**23,218**	**21,447**	**230,146**	**224,583**
TOTAL CAR	**70,122**	**64,768**	**703,116**	**705,302**
N.A. Truck	**27,320**	**23,797**	**264,840**	**281,605**
Imported Truck	**5,016**	**4,702**	**50,751**	**49,088**
TOTAL TRUCK	**32,336**	**28,499**	**315,591**	**330,693**
TOTAL CANADA SALES	**102,458**	**93,267**	**1,018,707**	**1,035,995**

*Includes Passport and Saab sales.
**Break down of N.A.-built and imported sales not available.
NOTE: N.A. sales are cars and trucks built in the United States and Canada.
Source: Automotive News Data Center and Assn. of Intl. Automobile Mfrs. of Canada

Automakers, gas refiners debate vapor control units

EPA faced with Nov. 15 deadline

JACK KEEBLER
Staff Reporter

As you fill up your car at the service station you can smell the sharp scent of gasoline. And on a warm sunny day, you can even watch the gasoline waves boil and swirl around the pump nozzle stuck in the tank filler neck.

These sharply scented and wildly boiling hydrocarbon gasses are displaced from the vehicle's fuel tank by the incoming liquid fuel. And these refueling vapors contribute significantly to the air-pollution problem.

A long-standing controversy is raging again between automakers and petroleum refiners as they are being forced by the 1990 Clean Air Act Amendments to clean the vapors up.

The controversy centers on which group can most cost-effectively and safely handle a billion-dollar problem that most people never notice.

Some states and the federal government want the vapors captured before they do harm by exposing people directly to a suspected carcinogen or by reacting chemically with oxides of nitrogen and sunlight to create low-level ozone.

The topic of onboard vapor containment has heated up in recent weeks as the EPA approaches a Nov. 15 deadline for writing regulations requiring vehicles to be equipped with vapor-recovery systems for the 1996 model year.

■ TWO CONTROL OPTIONS

Two primary ozone-control strategies are being considered: onboard vapor-recovery canisters and Stage II vapor-recovery systems in service stations. A third ozone-control option is to reduce gasoline's propensity to evaporate and vaporize.

One primary option is to capture the vapors in a large tank or canister within the vehicle. The vapors would be circulated into the engine during running and consumed by the combustion chamber and catalyst. Carmakers would, of course, pass on the cost of this vapor recovery device to customers. Per-vehicle cost estimates for systems range from an oil industry low of $13 to a General Motors high of $80.

The other primary strategy is to capture these vapors in a system installed on the service station's pumps. These are called Stage II systems, because stations already have Stage I systems that collect vapors when fuel-delivery trucks fill their underground tanks.

Stage II systems have been in use in California for a number of years. They are also in use in Washington D.C., and St. Louis. And they are currently being installed at stations in New Jersey and New York. Other states are considering them.

The third control strategy — important by itself or in combination with the other controls — is a large reduction in gasoline's volatility, that is, the ease with which the fuel evaporates. Reducing gasoline's volatility is one of the chemical reformulations being considered by the EPA and the Auto/Oil Air Quality Improvement Research program.

But refiners tend to fight reductions in volatility because it means they must use less low-cost butane in their fuel blends. According to the EPA, controlling gasoline volatility would cost only 2 to 3 cents per gallon and would reduce total current hydrocarbon emissions nationally by 8 percent. Refiners say the cost might be closer to 16 cents per gallon.

"Reformulating gasoline is the single most environmentally significant initiative we can take to reduce air pollution," said EPA Administrator William K. Reilly. The Clean Air Act requires reformulated gasolines in the nine cities with the highest ozone levels by 1995. The law also allows any other city exceeding the federal ozone standard to adopt a reformulated fuels program.

■ A CASE FOR CANISTERS

Oil company interests, including William F. O'Keefe, the American Petroleum Institute's chief operating officer, favor hardware on vehicles. O'Keefe told EPA hearings in Detroit last month that the congressional mandate to require refueling canisters on vehicles beginning with 1996 model cars and trucks was "clear and unambiguous."

But car companies say the Clean Air Act amendments mandate that the EPA issue regulations only after consultation with the National Highway Traffic Safety Administration.

NHTSA seems concerned about the safety of installing these devices. Carmakers report that agencies such as NHTSA, the National Transportation Safety Board and the Insurance Institute for Highway Safety have warned that the on-board system would pose "a significant fire hazard if it failed during normal driving or ruptured during a crash."

But the petroleum industry disputes any deterioration in vehicle safety. In fact, O'Keefe told the EPA that safety might improve.

"We should expect to see safety improvements through the adoption of the refueling canister system," he said. O'Keefe maintained that the new systems would simply be "an expansion of existing technology which has already proven safe over two decades of use on cars and trucks."

Carmakers maintain that the problem and these systems are not that simple.

"These canisters would be three or even four times larger than the 850 cc to 1,500 cc containers now used for capturing fuel systems evaporative emissions," said Jim Pasek, GM's manager of federal activities.

"They are not simply an extension of our existing technology. NHTSA did some testing and they rightly asked, 'Why take the risk.' "

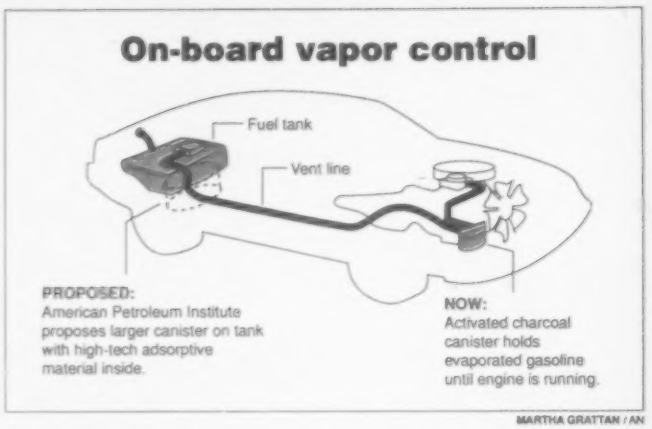
Pasek said that additional danger would come from the unproven nature of the new systems; the additional, larger and more complex system plumbing; more connections and fitting the larger canister into existing body structures.

The petroleum industry has been developing and testing demonstration refueling canister systems for vehicles since 1978, according to O'Keefe. The industry hopes to prove that these systems are safe, effective, practical and cost effective to government regulators.

Initially, that would help them avoid the installation of additional Stage II systems at fueling stations. Later, once onboard systems were in wide use, it would mean that Stage II systems would be waived by the EPA, according to O'Keefe.

There are two major issues that on-board canisters do not address: First, they would be installed only in new vehicles. That might mean that it would be 15 to 20 years before all vehicles had the canisters. Stage II systems could be installed in as little as three to four years and would control vapors from all vehicles.

Second, ozone is a regional problem. Carmakers point out that the most cost-effective way to deal with the problem is in the ozone non-attainment areas.


On-board vapor control
Fuel tank
Vent line
PROPOSED:
American Petroleum Institute proposes larger canister on tank with high-tech adsorptive material inside.
NOW:
Activated charcoal canister holds evaporated gasoline until engine is running.

MARTHA GRATTAN / AN

Canada sales rise 9.85%

ANNE E. WRIGHT
Chief Statistician

Car and light-truck sales in Canada made a comeback in September, rising 9.85 percent over the same month in 1990.

The performance bolstered industry hopes for an economic turnaround in Canada. A 9.0 percent drop in August broke a string of four consecutive monthly gains, and executives hailed September's performance as proof that the recovery has begun.

"The outlook is much better," said James G. O'Connor, president and chief operating officer of Ford of Canada. Although sales still vary by region, the economy "has at least bottomed out," O'Connor said.

The prime lending rate, for example, is now about 9.5 percent, down from 14 percent a year ago.

With the September performance, nine-month sales of cars and light trucks in Canada trailed 1990 by only 1.7 percent.

Car sales rose 8.3 percent in September, lifting year-to-date volume to 703,116, just 0.3 percent below the year-ago total.

Truck sales were up 13.5 percent in September over the same month in 1990. For the year, the deficit narrowed to 4.6 percent below 1990.

Each of the Big 3 and nine importers posted gains for the month. Suzuki was up more than 100 percent for the second straight month, and Nissan jumped 72.5 percent.

Hyundai, Jaguar, Mercedes-Benz, Toyota and Volvo reported double-digit percentage losses.

For the year, Chrysler was the only Big 3 company to report an increase over 1990. Importers reporting nine-month gains were: BMW, 10.5 percent; Honda, 5.5 percent; Nissan, 13.54 percent; Peugeot, 53.5 percent and Subaru, 12.89 percent.

Staff Correspondent Jeremy Sinek in Toronto contributed to this report.

Ford predicts strong finish

TORONTO — Even though new-vehicle sales were down 1.7 percent through September, Ford of Canada officials believe the industry will rebound and finish above 1990's total of 1.3 million units.

The company predicts 1.35 million car and truck sales this calendar year and a 6 percent increase in 1992. Falling interest rates and rebounding consumer conference are two reasons given for the optimistic estimate.

Fifty-six percent of Canadians surveyed by Ford believe the next 12 months will be a good time to buy a new car.

Ford also said it will follow the U.S. lead and adopt a single-price policy on the four-door, five-door and wagon versions of the Escort LX. Manual transmission versions will sell for $11,695 ($10,359 U.S.).

— Jeremy Sinek

Vehicle stocks remain lean

JIM HENRY
Staff Reporter

The inventory of domestic-built cars on Oct. 1 was the lowest for that date in nine years, with 1,081,100 million units in stock.

And the days' supply of domestic light trucks was down sharply from 75 a month earlier to 61.

Ford beat Chevrolet in an end-of-model-year sales race that cleared the shelves of full-sized pickup trucks. Ford's inventory of F-series pickups fell to 32 days from 84 days on Sept. 1. Chevy had a 46-day supply of C/K pickups, down from 90 days on Sept. 1.

Although domestic car stocks were lower than a month earlier, the days' supply rose to 53 from 50. And while the days' supply of domestic trucks plunged, there were more units in inventory than on Sept. 1. Changes in the production and sales mixes account for those apparent paradoxes.

On Oct. 1, the industry had a relatively lean 58-day supply of domestic and imported cars and light trucks — down slightly from 60 days a month earlier.

Inventories swelled a bit for Toyota Motor Sales U.S.A. Inc., which began September with a thin 23-day supply. As of Oct. 1, Toyota was at 31 days, matching American Honda Motor Co. Inc. for the lowest days' supply of any active company.

The final countdown continued for Peugeot Motors of America and Sterling Motor Cars, each with less than a month's worth of cars in dealers' hands. Both companies announced in August they had quit importing new cars. Peugeot reported a 25-day supply on Oct. 1; Sterling had 20 days. AN

GASOLINE

New formulas mean cleaner air

continued from PAGE 3

during the federal test procedure occur during the first three minutes of warm-up when the catalyst is cold.

■ UNITED EFFORT

In an effort to ensure gasoline's place in the motor-fuels continuum, the Big 3 and 14 U.S. oil companies formed a research consortium in October 1989. It is called the Auto/Oil Air Quality Improvement Research Program.

This reformulation study is crucial because despite giant emissions clean-up strides, gasoline-powered vehicles have remained a significant contributor to air pollution problems.

Even with electronic control of fuel and spark, fuel-vapor recovery systems and catalyst control of exhaust emissions, the increasing number of vehicles and miles driven each year make vehicles a serious air pollution problem — particularly in large metropolitan areas. About 100 cities in the United States are not in compliance with the National Ambient Air Quality Standard for ozone.

"Regardless of the level of clean-up so far, gasoline-powered vehicles are still a major source of pollution in this country," said Paul Machiele, an EPA project manager at the Ann Arbor, Mich., emissions laboratories. "And they remain one of the most cost-effective targets."

Emissions experts at the EPA and the California Air Resources Board confirm that the results from the auto-oil consortium effort have been "extremely helpful" in writing new regulations.

Colucci, who is a co-chairman on the auto-oil consortium's task force, says there are several reasons why reformulated gasoline makes sense for both carmakers, refiners and consumers.

■ It is dispensed from a conventional gas pump and the delivery infrastructure is already in place.

■ Reformulated gasoline can be used in conventional vehicles, providing an immediate emissions reduction from all vehicles without modifications.

■ Reformulated gasoline will likely be priced competitively with non-reformulated gasoline. The EPA estimates the price increase to be about 5 cents more to refiners.

"Part of the problem in determining how much it'll cost is determining how much people are willing to pay for cleaner gas," said William F. O'Keefe, vice president and chief operating officer of the American Petroleum Institute.

"Surveys I've seen suggest people are willing to pay a nickel more. But possibly not 16 cents more. I would guess that the initial cost to the refiner would be anywhere between five and 10 cents. But as demand grows those costs could go up considerably depending on the level of changes to individual refineries," he said.

The private company and government sources agree that the price at the pumps, naturally, will depend on market pressures.

There are many different ways to chemically change gasoline to reduce emissions.

One way to reduce evaporative emissions is to reduce the fuel's volatility or propensity to evaporate. This is done by reducing the amount of "light-end" hydrocarbon blends that evaporate at higher ambient temperatures. Another way to provide an emissions reduction is to make the hydrocarbon molecules of the fuel less complex and easier for the combustion chamber and catalytic converter to digest into carbon dioxide and water vapor.

Another refining alteration might produce a less reactive hydrocarbon molecule that does less to contribute to ozone formation. Yet another modification blends in oxygenates — like methyl tertiary butyl ether, derived from methanol — that make the engine run slightly leaner (oxygen rich) and reduces carbon monoxide emissions. A final reformulation trick might be to blend in a better deposit-control additive to help keep intake ports, intake valves and injectors clean.

■ FIRST STEPS TAKEN

Eight American petroleum companies have already introduced mildly reformulated gasolines. Most have been introduced in major metropolitan areas.

But these fuels do not meet the strict letter of the law in the Clean Air Act. It stipulates that reformulated gasolines must be on sale by Jan. 1, 1995, in nine U.S. cities that fail to meet national ozone standards.

The act also states that reformulated gasolines meet a performance standard that requires a 15 percent reduction in volatile organic compounds and toxics from vehicles with no increase in nitrogen oxides.

ARCO was the first company to introduce a more environmentally benign gasoline when it brought EC-1 (emission control) to the South Coast Air Basin of California in September 1989. This unleaded grade replaced a leaded regular fuel and was to be used only in leaded-fueled vehicles.

ARCO recently introduced an EC premium that it claims reduces aromatic hydrocarbon, carbon monoxide and benzene emissions.

Other companies offering more environmentally benign fuel are Diamond Shamrock, Conoco, Phillips, Marathon, Shell, Exxon and Chevron. These fuels are being offered in various markets across the United States.

Paul Machiele, project manager at the EPA's Ann Arbor, Mich., emissions labs, reflected on the usefulness of the consortium.

"Working with the consortium hasn't always been easy," he said. "But it has been extremely effective at getting all of the parties together. In that way, they will probably be more happy with final regulations." AN

Oil industry research helps regulators

JACK KEEBLER
Staff Reporter

The Auto/Oil Air Quality Improvement Research Program is a cooperative research program initiated by the Big 3 and 14 petroleum companies.

It conducts research and testing to develop data for use by regulators on the potential improvements in vehicle emissions and air quality — primarily improvements in ozone — from reformulated gasoline, other alternative fuels and developments in automotive technology.

In December 1990, the consortium released its initial findings from a $15 million phase one program and announced a second phase at a projected cost of $25 million. Some of the things already discovered about gasoline reformulation include:

■ Adding oxygenates like methyl tertiary butyl ether and ethyl tertiary butyl ether reduces the amount of exhaust emissions (hydrocarbons and carbon monoxide) and the benefits have been quantified.

■ Reducing gasoline olefin content reduces ozone formation, due to its impact on evaporative, running-loss, refueling and storage emissions.

■ Reducing aromatics and the boiling range of gasoline (referred to as T90) also reduces exhaust emissions.

During the initial research phase 2,200 vehicle emissions tests were conducted with 53 cars and light-duty trucks with 29 reformulated gasolines.

The tests were carried out at GM and Ford Motor Co. certification labs. Vehicles tested included 20 1989 model cars and light trucks, 14 1983-85 model vehicles and 19 prototype flexible- and variable-fuel vehicles.

The reformulated fuels tested to date include 16 fuels with varying amounts of aromatic, olefin and methyl tertiary butyl ether and different boiling ranges. AN

DOMESTIC AND IMPORTED CAR & LIGHT-TRUCK INVENTORIES

Vehicles are domestic unless noted. Vehicles are cars unless noted.

	Units	Days' Supply Oct. 1, 1991	Sept. 1, 1991
ALFA ROMEO (imp.)	1,500	161	137
Acura (imp.)	34,200	71	73
Domestic car	64,000	16	32
Imported car	28,100	50	53
Honda	92,100	24	37
AMERICAN HONDA	126,300	31	42
BMW (imp.)	9,100	47	54
Summit	4,500	105	130
Talon	10,700	101	106
Premier	2,800	105	85
Wrangler (trk.)	12,300	79	71
Cherokee (trk.)	38,100	91	78
Grand Wagoneer (trk.)	0	0	48
Comanche (trk.)	2,800	119	144
Total Jeep-Eagle	18,000	103	107
Total Jeep-Eagle (imp.)	0	0	7
Total Jeep-Eagle (trk.)	53,200	87	78
Laser	9,900	83	91
Sundance	17,600	66	78
Acclaim	15,100	42	66
Voyager (trk.)	38,300	71	53
Total Plymouth	42,800	57	76
Total Plymouth (trk.)	38,300	71	63
LeBaron A	4,200	74	72
LeBaron J	4,000	76	65
Fifth Avenue	5,600	70	73
Imperial	2,100	104	111
New Yorker C	1,900	57	58
Town & Country (trk.)	900	45	108
Total Chrysler	17,800	74	72
Total Chrysler (imp.)	28,500	96	122
Total Chrysler (trk.)	900	45	100
Shadow	20,000	62	70
Monaco	1,400	75	52
Daytona	5,700	126	153
Spirit	15,000	47	90
Dynasty	14,800	30	110
Vans (trk.)	12,300	117	81
Ram Wagon (trk.)	2,300	67	61
Caravan (trk.)	37,300	56	59
Caravan C/V (trk.)	900	63	67
Ram 50 (imp. trk.)	3,400	259	310
Ramcharger (trk.)	2,000	140	141
Dakota (trk.)	24,000	103	75
Pickups (trk.)	22,200	118	117
Total Dodge	104,500	47	88
Total Dodge (imp.)	7,600	129	130
Total Dodge (trk.)	107,000	84	79
Total domestic car	135,300	57	83
Total imported car	28,100	113	139
Total domestic truck	199,400	81	75
CHRYSLER CORP.	362,800	71	81
Imported car	600	29	28
Imported truck	200	37	38
DAIHATSU	800	31	30
Escort	71,000	67	86
Mustang	26,100	106	92
Tempo	32,700	46	49
Taurus	50,100	63	66
Thunderbird	19,500	94	102
Probe	13,700	68	46
Crown Victoria	24,300	93	117
Vans (trk.)	29,100	83	83
Aerostar (trk.)	33,000	68	60
Club Wagon (trk.)	1,800	59	26
Ranger (trk.)	64,200	83	72
Bronco (trk.)	6,600	77	87
Explorer (trk.)	49,800	59	59
Pickups (trk.)	85,100	32	84
Total Ford Div.	237,400	68	73
Total Ford Div. (imp.)	13,800	105	125
Total Ford Div. (trk.)	269,600	52	73
Topaz	8,300	66	55
Sable	13,600	65	51
Cougar	13,500	76	51
Grand Marquis	22,500	66	76
Total Mercury	57,900	68	59
Total Mercury (imp.)	28,000	113	127
Continental	7,900	31	49
Town Car	16,700	56	63
Mark VII	2,300	67	59
Total Lincoln	26,900	47	58
Total L-M Div.	84,800	60	59
Total domestic car	322,200	66	88
Total imported car	40,600	109	111
Total domestic truck	269,600	73	73
FORD MOTOR CO.	632,400	68	73
Somerset/Skylark	5,500	95	58
Century	12,800	31	32
Regal	19,400	53	66
LeSabre	18,200	57	67
Roadmaster	8,200	48	48
Reatta	500	57	43
Electra/Park Ave.	19,600	45	69
Riviera	2,300	65	69
Total Buick	86,500	48	55
Allante	1,100	127	86
Seville	3,800	55	116
DeVille	30,700	53	71
Brougham	10,200	134	137
Eldorado	2,400	67	71
Total Cadillac	48,200	63	82
Geo Prizm	14,700	35	37
Cavalier	33,400	52	55
Camaro	15,700	81	83
Corsica/Beretta	24,000	37	38
Lumina	29,800	41	64
Caprice	29,400	84	130
Corvette	4,300	83	95
Vans (trk.)	25,500	96	107
Sportsvan (trk.)	600	47	28
Geo Tracker (trk.)	7,400	76	77
Astro (trk.)	12,700	47	36
Lumina APV (trk.)	5,100	26	63
S10 (trk.)	53,900	77	71
S10 Blazer (trk.)	22,600	51	52
Blazer (trk.)	1,800	56	64
Suburban (trk.)	8,400	60	53
Pickups (trk.)	92,000	46	90
Total Chevrolet	151,300	45	54
Total Chevrolet (imp.)	55,800	177	177
Total Chevrolet (trk.)	230,900	54	73
Calais	10,400	66	78
Cutlass Ciera	16,300	31	42
Cutlass Supreme	19,200	67	80
88	23,900	72	72
98	15,700	69	67
Toronado	1,000	69	62
Silhouette (trk.)	3,500	64	59
Bravada (trk.)	4,100	85	85
Total Oldsmobile	86,500	57	64
Total Oldsmobile (trk.)	7,600	74	70
Sunbird	14,800	56	74
Firebird	7,800	85	86
Grand Am	15,100	59	54
Pontiac 6000	1,900	90	91
Grand Prix	13,800	48	45
Bonneville	18,400	66	66
Trans Sport	5,500	73	57
Total Pontiac	71,000	68	62
Total Pontiac (imp.)	5,200	43	58
Total Pontiac (trk.)	5,500	73	57
Vans (trk.)	11,300	112	100
Safari (trk.)	6,500	60	61
S15/Sonoma (trk.)	17,400	92	92
S15 Jimmy (trk.)	7,400	77	73
Jimmy (trk.)	2,600	381	306
Suburban (trk.)	3,800	53	56
Pickups (trk.)	34,500	74	97
Total GMC (trk.)	83,300	83	88
Total Saturn	12,600	42	48
Total domestic car	456,900	51	58
Total imported car	88,200	156	134
Total domestic truck	326,400	68	76
GENERAL MOTORS	843,500	57	69
HYUNDAI (imp.)	38,000	47	51
Imported car	8,400	201	225
Truck (dom./imp.)	33,800	97	100
ISUZU	42,200	108	114
JAGUAR (imp.)	3,200	106	47
Domestic car	16,600	98	71
Imported car	23,000	54	44
Truck (dom./imp.)	19,200	45	42
MAZDA	58,800	58	48
MERCEDES-BENZ (imp.)	10,300	46	43
Domestic car	17,800	105	77
Imported car	27,000	90	129
Imported truck	9,900	88	123
MITSUBISHI	54,700	94	107
Infiniti (imp.)	6,400	56	27
Domestic car	22,800	60	73
Imported car	71,800	60	76
Truck (dom./imp.)	36,500	52	68
Nissan	131,100	59	73
NISSAN MOTOR CORP.	137,500	58	69
PEUGEOT (imp.)	500	25	27
PORSCHE (imp.)	1,200	93	146
RANGE ROVER (imp. trk.)	900	78	86
SAAB (imp.)	3,500	38	40
STERLING (imp.)	200	20	22
Domestic car	22,600	87	154
Imported car	27,700	150	142
SUZUKI	50,300	114	148
Car (dom./imp.)	2,500	113	144
Truck (dom./imp.)	1,300	85	87
SUZUKI	3,800	92	96
Lexus (imp.)	12,100	47	21
Domestic car	23,700	22	16
Imported car	35,400	30	29
Imported truck	29,800	36	29
Toyota	88,900	29	34
TOYOTA MOTOR SALES	101,600	31	33
Audi (imp.)	7,700	135	220
Volkswagen (imp.)	34,500	111	148
VW/Audi	42,200	112	160
VOLVO (imp.)	10,000	129	76
YUGO (imp.)	1,000	74	93
Domestic car	1,081,100	53	58
Imported car	527,600	71	74
TOTAL CAR	1,608,700	57	56
Domestic truck	750,000	61	75
Imported truck	132,700	53	54
TOTAL TRUCK	931,500	60	70
TOTAL STOCK	2,540,200	58	60

Program car volumes to hold steady in '92

CHARLES M. THOMAS
Staff Reporter

INDIANAPOLIS — Program vehicle volumes are expected to remain at about the same levels in 1992 as this year, even though the Big 3 are lengthening the time daily rental units stay in service before being remarketed to dealers.

Program vehicle sales are estimated at about 1.5 million units this year, which is up slightly from last year. Program vehicle sales next year are expected to edge up even higher as Japanese automakers increase their fleet projections. Nissan Motor Corp. in U.S.A. began phasing out its program car sales in 1990 but said it is re-entering the market this year.

Ford, General Motors and Chrysler have increased the length of time and mileage that program vehicles spend in service, largely because dealers grumbled that the deluge of these vehicles hurt new-vehicle sales.

Program vehicles now average six months or 12,000 miles in service. In April, for example, some GM program vehicles crossed the auction block with as few as 6,000 miles on them while others had 17,000 miles.

By keeping vehicles in rental fleets for a longer period of time, so that each vehicle accumulates higher miles before going through the auctions, automakers are providing a greater distinction between new vehicles and used vehicles.

Dealers and consumers think of program cars with 10,000 miles or less on their odometers as "nearly new." These vehicles are substantially less expensive than new vehicles and have the remaining portion of a new-vehicle warranty.

Executives from the Big 3 explained their plans last month at the National Auto Auction Association convention.

"The attempt to extend the average term of those vehicles in service and to somehow extend the average miles to a higher level will make them look less like a new car and more like a used vehicle," said Tom Cunningham, manager of vehicle remarketing for Ford Motor Credit Co.

Mike McHale, manager of GM's auction department, said, "It is in the manufacturers' best interest to make a clearer distinction between new and nearly new vehicles," he said.

N.A. Malenfant, used vehicles sales and marketing manager for Chrysler, was more to the point. "Chrysler doesn't sell nearly new cars," he said.

GM remarketed about 500,000 program vehicles to its dealers in the January through September period.

"Program cars don't appear to be a flash in the pan," said McHale. "In 1990 we sold 478,000 program cars through auctions, and we have already sold more than that this year. We are declaring it a big year."

Chrysler remarketed more than 200,000 units through September, which is equal to the number the company sold in 1990, according to Malenfant.

"We are looking forward to a strong fourth quarter and a good 1992," he said. "We expect to have enough vehicles next year to satisfy the needs of our dealers."

Cunningham said Ford will sell a higher number of cars to its dealers through the auction system in 1992 than this year. For the January through September period, Ford sold about 300,000 program vehicles, he said.

Ford and GM will continue their daily rental fleet programs, which include an offer to repurchase 100 percent of the rental vehicles.

Chrysler has a different program. Instead of repurchasing the vehicles, Chrysler offers a guaranteed residual value on 75 percent of the cars sold to daily rental companies.

The daily rental companies remarket the vehicles through the auctions themselves.

SURVEY

Most dealers rely on program cars

continued from PAGE 1

they don't.

"Dealers feel program cars are dynamite and will help them survive these tough times," said George Parker, the instructor at the academy who was responsible for the survey.

Manufacturers sell program cars to daily rental companies, buy them back at a pre-agreed price, then remarket them to dealers through auto auctions.

Rancor by some dealers centers on the rising tide of program vehicles — about 1.5 million this year — and their tendency to substitute for new-car sales. Dealers also fear manufacturers have created a secondary distribution network for program cars.

Of the dealers surveyed, 68 percent believe automakers should continue program vehicles and 25 percent said they should be discontinued. The remainder were unsure.

Dealers adamantly opposed manufacturers allocating program units. Of dealers surveyed, 61 percent said manufacturers should not allocate program cars and 21 percent approved of the practice.

"The high percentage of dealers saying they would approve of an allocation method reflects the perception by dealers that they are paying too much for program cars at auction and they they might be able to get them cheaper on an allocation basis from the manufacturer," said Parker.

Direct distribution of program cars by manufacturers apparently gives most dealers the shivers. The Big 3 domestic automakers are looking for ways to bypass the auction process. GM and Chrysler are experimenting in Florida with selling vehicles directly to dealers.

Dealers made an average gross profit of $1,155 on program cars compared to $1,086 on a trade-in and $1,137 on a repossessed vehicle purchased at auction. The average gross on a new car is $1,150.

Though grosses for a new car and program car are almost the same, as a percent of the selling price, the gross on program cars is much higher than on new cars.

Dealers also make an average of $576 in the finance and insurance department on program cars compared to $270 on new cars. These add-ons include extended service contracts, credit life insurance and financing charges.

NADA formed the task force in June to examine the growth and distribution of program cars. The task force is expected to make recommendations to the NADA board of directors meeting later this month.

Parker said the survey is not connected to the task force. Strauss said he has not seen Parker's study.

The survey was conducted in three parts among representatives from 250 dealerships attending the last nine classes at the NADA Dealer Candidate Academy.

NADA Dealer Academy is a training institute for dealership personnel, including dealer sons and daughters and managers.

IMPORTED PARTS USE AT SELECTED PLANTS

Parts and material spending in millions of dollars; for year ended Sept. 30, 1989

Auto plant [1989 products]	Imported parts	Domestic parts	Percent domestic
NUMMI (Fremont, Calif.) Geo Prizm, Toyota Corolla	$ 765.2	$ 376.7	33
Nissan (Smyrna, Tenn.) Sentra, pickup truck	858.0	471.4	35
Toyota (Georgetown, Ky.) Camry	676.4	358.4	35
Diamond-Star (Normal, Ill.) Plymouth Laser, Eagle Talon, Mitsubishi Eclipse	420.3	223.1	35
Mazda (Flat Rock, Mich.) Mazda MX-6, Ford Probe	1,171.9	844.9	42
Honda (Marysville, Ohio) Accord, Civic, motorcycles	987.3	2,736.6	73
Ford (Lorain, Ohio) Thunderbird, Cougar, Econoline, Club Wagon	928.5	3,488.5	79
Ford (Dearborn, Mich.) Mustang	332.7	1,291.4	80
Ford (Wixom, Mich.) Continental, Mark VII, Town Car	463.1	2,044.6	82
Chrysler (St. Louis) LeBaron J, Daytona	481.3	2,746.8	85
Ford (Kansas City, Mo.) Tempo, Topaz, F-series trucks	261.3	2,850.0	92
Ford (Atlanta) Taurus, Sable	100.2	2,750.7	96
GM (Ypsilanti, Mich.) Caprice	33.6	1,996.9	98

Source: Foreign Trade Zone Board, 1989 Annual Report

briefs

Ford transmission lawsuit ends

WASHINGTON — A 10-year suit involving 16 million 1972-1979 Ford Motor Co. cars and light trucks with automatic transmissions has ended on a technicality.

The transmissions allegedly were prone to slip unexpectedly from "park" to "reverse."

The federal Court of Appeals for the District of Columbia refused to rule on class-action certification because the only plaintiff named in the appeal, John F. Walsh, had settled with Ford Motor Co. for $25,000 in a Missouri court.

Walsh had released Ford from claims.

Beverly C. Moore Jr., attorney for the plaintiffs, vowed to continue the fight with similar pending cases.

A National Highway Traffic Safety Administration investigation into the matter ended by negotiation 11 years ago.

The government agreed to drop the case, and Ford agreed to send instrument-panel stickers to owners of the cars, warning drivers to put the gearshift lever firmly into "park," turn off the engine and set the parking brake before exiting the vehicle.

Koreans report strong first half

SEOUL — Buoyed by steady growth in domestic demand and a push into new export markets, South Korean automakers last week reported strong gains in sales for the first half of the year.

- Hyundai Motor Co., the industry's biggest producer, said net income rose 83.1 percent from a year earlier, to 39.5 billion won (about $54.5 million), on a 36.8 percent rise in revenue, to 2.7 trillion won ($3.7 billion).
- Kia Motors Corp., the second-largest producer, said earnings dropped 66 percent, to the equivalent of $7.7 million, despite a 12 percent sales rise to $1.8 billion.
- Sales at Asia Motors Co., a unit of Kia Motors, rose 16.1 percent, to $606.1 million. Profit for the commercial-vehicle maker edged up 9.1 percent, to $3.9 million.
- Ssangyong Motor Co., which only produces trucks, said sales edged up 8.7 percent, to $255 million, and profit soared 74.9 percent, to $6.48 million.

Most Cadillacs under one roof

DETROIT — Cadillac will build all its models except the Brougham at one plant in the 1994 model year, when production of the DeVille and Fleetwood is moved from Lake Orion, Mich., to the Detroit-Hamtramck plant.

Last week's announcement had been expected.

General Motors' Buick-Oldsmobile-Cadillac Group, which operates the Lake Orion plant, said production of the Oldsmobile Ninety Eight will remain at Lake Orion, and it will build the new G-car platform, which debuts in the 1994 model year and will yield the Oldsmobile Toronado and Buick Riviera.

The Cadillac-operated Hamtramck plant will cease its production of the Toronado and Riviera, currently built on the E-platform, after the 1993 model year.

Cadillac Brougham will continue to be assembled at the Arlington, Texas, plant.

PARTS

U.S. group fights Nissan tax break

continued from PAGE 3

only a portion of the equation for domestic content and apply it to us and say we're not meeting our objectives," said Kahl. "Our purchases of foreign materials have decreased and will continue to decrease."

Nissan estimates that under EPA criteria, its 1992 Sentra has 74.6 percent "domestic content, up from 63 percent in 1989. The Smyrna-built pickup truck is currently about 57 percent domestic, Nissan says. The Smyrna plant will begin building a Stanza next year that Nissan says will also be close to 75 percent domestic.

The Automotive Parts and Accessories Association has opposed other applications in the past and has lobbied for tighter trade-zone rules. It recommended that any expansion for Nissan be limited to vehicles that are exported. Nissan has never exported more than a few hundred vehicles a year from Smyrna.

Nissan did not specify how much it would save with an expanded trade zone. But based on figures cited in other trade-zone applications, tariff savings could be $6 million to $10 million a year.

Audi 100 ads cite German reviews

Audi of America is rolling out its redesigned 1992 100 with an ad campaign built around testimonials from German car enthusiast publications.

The car was introduced in Europe last year and went on sale in the United States on Oct. 1.

The ads focus on three German automotive journals, *Auto Motor Und Sport, Auto Bild* and *Mot*, that rated the 100 ahead of the Mercedes 300E 2.6 and BMW 525i in terms of styling, handling, control and economy. The campaign broke Sept. 30 with a print ad in *Automotive News*.

TV and radio spots debut today.

Dealer rebates bloom on 1992 models

ARLENA SAWYERS
Staff Reporter

Several General Motors divisions, Jeep-Eagle and Volkswagen United States upped the incentive ante for dealers.

Chevrolet is paying its dealers $2,000 on the 1991 Corvette, $3,000 on the 1991 Corvette ZR-1, $1,000 on the 1992 Corvette and $2,000 on the 1992 Corvette ZR-1.

Also, Chevrolet dealers earn rebates of $300 to $750 on 1991-92 Camaros and $200 to $500 on 1991-92 Caprices, based on performance against quota. Chevrolet's program expires Feb. 4.

Members of the American Quarter Horse Association and the National Cattleman's Association who received coupons worth $500 off the price of any **GMC Truck** may instead use the coupon toward the purchase of any Chevrolet truck.

Through Feb. 4, **Pontiac** is paying dealers $300 on sales of 1992 Sunbirds.

In addition to its previously announced customer rebate program, **Buick** is circulating coupons good for cash discounts. Owners of 1990 and older Buicks received coupons good for $500 off the price of a 1992 LeSabre. Consumers aged 50 and older can use a coupon in the October/November issue of *Modern Maturity* worth $400 on any new Buick.

Consumers who test drive a 1992 Delta Eighty Eight will receive a $50 savings bond from **Oldsmobile,** dealers said.

Jeep-Eagle is paying a dealer incentive of $1,000 on the 1991 and 1992 Jeep Cherokee Laredo and $750 on the 1991 and 1992 base Eagle Talon through Dec. 31.

Volkswagen United States is paying dealer rebates of $500 on sales of 1991 Jetta, 1991 Fox and 1991 Golf models and $1,500 on the 1991 Passat. The program runs indefinitely.

INCENTIVE WATCH — DEALER INCENTIVES

NEW PROGRAMS

GENERAL MOTORS (expires Feb. 4)

Chevrolet Caprice (1992)	$250-800, quota
Camaro (1992)	$300-750, quota
Corvette ZR-1 (1992)	$2,000
Other Corvette (1992)	$1,000
Corvette ZR-1 (1991)	$3,000
Other Corvette (1991)	$2,000
Pontiac Sunbird	$300

CHRYSLER CORP. (expires Dec. 31)

Eagle Talon (base, 1991-92)	$750
Jeep Cherokee Laredo (1991-92)	$1,000

VOLKSWAGEN (1991 models, no expiration date)

Passat	$1,500
Jetta, Fox, Golf	$500

CONTINUING PROGRAMS

ALFA ROMEO (expires Dec. 31)

164, 164L automatic (1991)	Up to $200 per car monthly in floorplan aid

GENERAL MOTORS

Cadillac Allante (1991) (no expiration date)	$7,500 on first sale, $8,500 on additional sales

ISUZU (1991-92 models, unless otherwise noted; expires Dec. 31)

Cars*	$800-1,800
All pickups*	$1,000-1,500
4x4 pickups (bonus, 1990-91)	$500
Trooper*	$1,500-1,800
Rodeo*	$00-500

*Based on number sold

LOTUS (1991, no expiration date)

Elan	$5,000
Esprit Turbo	$11,000-15,000

MAZDA (1991 models; expires Nov. 4)

929	$2,000
323 (low-volume dealers)	Up to $500

MERCEDES-BENZ (1991 models, no expiration date listed)

300SE, 300SD, 300SDL, 300SEL	$3,000
420SEL, 560SEL	$5,000

MITSUBISHI (1990-91 models; rebates and terms vary by regions; programs expire Oct. 31)

Mirage	$250-1,500
Eclipse	$300-1,200
Galant	$300-2,100
Montero	$400-3,000
Pickups	$400-2,300

NISSAN (1991 models; expires Feb. 2, 1992)

300ZX	$2,500-3,500, quota

PEUGEOT (no expiration date)

405	$5,000
505	$6,000

SUBARU (1991 models; expires Nov. 4)

Legacy	$100-1,600, based on number sold

STERLING (no expiration date)

All models	$8,000*

*Or $3,000 if customer chooses 0 percent financing

TOYOTA (expires Nov. 4)

Corolla (1990-92)	$200-900, quota
Camry (1990-91)	$200-900, quota
Pickups	$200-1,300, quota

VOLKSWAGEN

All cars (1990, no expiration date)	$500-1,500

VOLVO (1991 models; expires Oct. 31)

740 series	$750-1,500
940 series	$1,500-2,500
780 coupe	$2,500

INCENTIVE WATCH — CUSTOMER INCENTIVES

CONTINUING PROGRAMS

CHRYSLER CORP.
All programs expire Dec. 31. Finance rates in lieu of rebates start at 6.9 percent on minivans, 4.9 percent on other models.

1992 models

Chrysler Imperial, New Yorker Fifth Avenue	$1,000
LeBaron coupe, New Yorker Salon	$750
LeBaron sedan	$500
Dodge Monaco	$1,500
Dynasty	$1,000
Shadow conv.	$750
Shadow highline, Daytona, Spirit	$500
Shadow America, Colt	$300
Dodge Ram pickup (gas engine), Ram van conversion, Ramcharger	$1,000
Ram van and wagon, Dakota	$750
Ram 50	$300
Eagle Premier	$1,500
Talon, Summit 4-dr.	$500
Summit 3-dr.	$300
Jeep Cherokee	$1,000
Comanche	$750
Wrangler	$500
Plymouth Sundance highline	$500
Acclaim, Laser	$500
Sundance America	$300

1990-91 models

Chrysler Imperial	$2,000
New Yorker Fifth Avenue and Salon, LeBaron sedan	$1,500
LeBaron coupe and conv.	$1,000
Dodge Shadow conv.	$2,000
Spirit, Monaco, Dynasty	$1,500
Daytona	$1,250
Colt GL, Shadow highline	$1,000
Shadow America, Colt	$700
Dodge Ram van conversion, Ram pickup (gas engine), Ramcharger	$1,500
Ram wagon, Ram van	$1,250
Dakota	$1,000
Ram 50	$750
Eagle Talon TSi, Premier	$1,500
Other Talon	$1,200
Summit 4-dr., Summit ES 3-dr.	$1,000
Summit base 3-dr.	$750
Jeep Cherokee, Grand Wagoneer	$1,500
Comanche	$1,000
Wrangler	$500
Plymouth Acclaim, Laser RS Turbo	$1,500
Other Laser	$1,200
Sundance highline	$1,000
Sundance America	$700
All awd minivans	$1,000
All 2wd minivans	$500

FORD MOTOR CO.

1992 models
Expires Dec. 3. In lieu of rebates, 4.8 percent loans on Probe, 7.9 on other Ford and Mercury; no finance incentive on Lincoln.

Ford Festiva, Mustang, Taurus	$500
Tempo*	$500
Thunderbird, Crown Victoria	$750
Escort GT and LX-E**	$750
Probe, Taurus SHO	$750
Aerostar*	$500
F series	$500
Ranger	$750
Bronco	$1,000
Mercury Sable	$500
Topaz*	$500
Tracer LTS*	$750
Capri, Cougar, Grand Marquis	$750
All Lincoln	$1,000

*Tempo, Topaz and Aerostar — $1,000 or 7.9 percent loan in Northeast
**Escort Pony and LX and Tracer sedan and wagon — $500 or 7.9 percent loan in Central and Great Lakes regions.

1990-91 models
1990-91 Ford models and 1991 L-M models, expires Dec. 3. In lieu of rebate, 4.8 percent loans on Festiva and Probe, 7.9 percent on other Ford and Mercury. No finance incentive on Lincoln.

Ford Escort (except GT), Mustang, Taurus, Tempo, Thunderbird	$400
Escort GT, Taurus SHO	$600
Festiva, Probe	$1,000
Aerostar*	$400
Ranger, F series, Econoline E-150 (except RV)	$400
Bronco, Econoline E-150 (RV)	$1,000
Mercury Tracer (except LTS), Topaz, Sable, Cougar	$400
Tracer LTS	$600
Capri	$1,000
All Lincoln	$2,000

*Aerostar — $1,000 or 7.9 percent in Northeast.

GENERAL MOTORS
Expires Feb. 4. Finance rates inlieu of rebates start at 4.9 percent for Buick, Oldsmobile and Pontiac; 6.9 percent for Chevrolet and GMC.

1992 models

Buick Skylark*	$250-750*
Century, Regal*	$250-1,000*
Riviera	$2,000
Chevrolet Caprice	$1,000
Geo Metro and Storm	$750
Geo Prizm, Camaro, Beretta, Lumina	$500
Cavalier	$300
G van, S/T Blazer, Lumina APV	$1,000
Geo Tracker, Astro, S/T pickup	$750
C/K pickup	$500
GMC G-van, S15 Jimmy (except Typhoon)	$1,000
Sonoma (except Cyclone, GT), Safari	$750
Sierra (except Crew Cab)	$500
Oldsmobile Cutlass Ciera (national)	$1,000
Regional programs, various models	$500-2,000
Pontiac Trans Sport	$1,000
Grand Prix	$750
LeMans, Firebird	$500

*Based on option package selected.

1991 models

Chevrolet Caprice	$1,000
Geo Metro, Camaro	$750
Geo Storm and Prizm, Beretta, Lumina	$500
Cavalier, Corsica	$300
V Blazer, Suburban, G-van, S/T Blazer, Lumina APV	$1,000
Geo Tracker, Astro, S/T pickup, R/V and C/K pickups	$500
GMC V Jimmy, Suburban	$1,500
S15 Jimmy, G-van, Safari	$1,000
Sonoma (except Cyclone)	$750
Sierra, [illegible]ckups	$500
Oldsmobile - regional programs, various models	$500-2,000
Pontiac Trans Sport, LeMans, Firebird	$1,000
Grand Prix	$750

HYUNDAI (expires Jan. 3, 1992)

Sonata with SE pkg. (1991), Excel with SE pkg. (1991)	$500
Scoupe (1991), Excel base (1991)	$750
Other Excel (1991), Other Sonata (1991)	$1,000
All 1992 models, if trade is a 1986-91 Hyundai	$1,000

MAZDA (car rebates expire Nov. 4; truck rebates expire Dec. 3)

RX-7 (1991)	$2,000
626 (1991-92)*	$1,000
Navajo (1991)	$1,000
Trucks (1992)	$1,000
MX-6 (1991-92)	$800
Protege (1990-91)*	$800

*Or 6.9 percent financing

MITSUBISHI (1990-91 models; expires Oct.31)

Mirage (S.E. and S.W. regions)	$750

SUBARU (expires Nov. 4)

Loyale 4wd (1991)	$500
Legacy (1991)	$1,200
XT, XT6 (1991)	$2,000

CONGRESS

Cunningham, Recchia on agenda

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ing for Chrysler Canada in 1986.

In August 1987, he returned to the United States as executive director of Dodge car and truck marketing and one month later was elected a vice president of Chrysler Corp.

He was named vice president of Service and Parts Operations in January 1988.

Cunningham has a bachelor's degree in business administration from Southern Illinois University in Carbondale, Ill., and took part in Harvard University's advanced management program.

Mitsubishi's Recchia also is a veteran of the Chrysler sales staff. He was with Chrysler for 15 years and was general sales manager of the Automotive Sales Group when he left in 1978 to become president of Fiat Motors of North America.

He has been with Mitsubishi Motor Sales of America since it began operations in 1982.

Before being appointed to his present position in December 1981, Recchia was a special marketing and management consultant for Mitsubishi Motors Corp.

Recchia had previous experience with Mitsubishi products at Chrysler, which was the sole importer of Mitsubishi vehicles until 1981.

As chief operating officer of Mitsubishi Motor Sales of America, Recchia also is a director and a member of the company's executive committee.

Recchia received a bachelor's degree from the University of Detroit and a master of business administration degree from Wayne State University in Detroit.

For further information, write Wendy Barhydt, Automotive News World Congress, UMTRI/OSAT, 2901 Baxter Road, Ann Arbor, MI 48108-2150.

The telephone number is 313-764-5592.

ESCORT

$500 rebate bolsters profit for dealers

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being tested in the West, Southeast and Northeast, but dealers do not have to participate.

Most Ford dealers say they like the program, and Roberts said the overwhelming majority have purchased the one-price cars.

Ralph Wheeler, general manager at Jim Babbitt Ford in Flagstaff, Ariz., said he has ordered 25 Escorts compared to his usual 10. "We will all make more money by having this concept in place," Wheeler said. "We will take the confusion out of buying and give the customer good value."

All automatic transmission LX models also have one price: $10,499. Roberts said Ford will not advertise the automatic transmission models and will not offer cash rebates on those models.

Bus Goode, owner of Goode Motor Inc. in Rupert, Idaho, said that even if margins are lower for the automatic models, the expected extra volume will bring in more money on the back end. "F&I and service contracts will increase," Goode said.

A sample sticker sent to Ford dealers showed that a $12,082 five-door LX automatic would have an option-package discount of $852 and a dealer-margin reduction of $731 to reach the $10,499 price.

Roberts said the one-price program was tried in Europe and sales of Escorts more than doubled.

"This is a narrowly focused program aimed at the young professional," he said.

Roberts said he does not know if the program will be expanded to other parts of the country or to other vehicle lines.

ISUZU

Name, not models, may leave Europe

continued from PAGE 4

Isuzu's European offerings include the forthcoming Opel/Vauxhall Frontera, which is based on the Isuzu Rodeo/Amigo, the Trooper, and light trucks.

Despite the company's denials, some observers consider Isuzu's pullout from the passenger-car business to be inevitable.

"It is a logical question," said analyst Neal Doying of Baring Securities (Japan) Ltd.

"From a profit standpoint it is a loss-making operation for them. It is detracting from the bottom line," he said.

Isuzu launched a restructuring plan last summer after reporting an operating loss of 16.8 billion yen ($129 million) for the six-month period ended April 30. It blamed the deficit on a sharp drop in U.S. and Japanese demand, exchange-rate losses and the costs of readying new products.

The restructuring calls for closer cooperation with General Motors, as well as a boost in production from 5,000 to 7,000 units monthly at its U.S. transplant joint venture, Subaru-Isuzu Automotive Inc. in Lafayette, Ind.

The Japanese company is expected to announce its new plans, including greater GM participation, after the financial statement for the full fiscal year is released in mid-November.

Isuzu says it expects sales in the current fiscal year ending Oct. 31 to slip to 510,000 units from 574,000 last year.

Ford expects loss in 3rd, 4th quarters

CHARLES M. THOMAS
Staff Reporter

Ford Motor Co. expects to report continued heavy losses in the third and fourth quarters of this year.

The prediction came in Ford's registration filed with the U.S. Securities and Exchange Commission for an issue of $750 million of convertible preferred stock.

The company blamed competition and industrywide overcapacity for the anticipated loss. The third-quarter loss will probably exceed Ford's $324 million second-quarter loss, the prospectus said.

Raising $750 million in a stock offering will help the automaker stabilize its debt-to-capital ratio, which has been rising for the last 18 months. The debt-to-capital ratio stood at 39 percent as of June 30, increasing from 32 percent at year's end.

The cash generated from the stock offering also will help pay for Ford's expensive capital spending program, which is pegged at more than $26 billion through 1995.

"Ford can either borrow more money or raise it through a stock issue," said Jean Claude Gruet, analyst with New York-based UBS Securities. "The decision to raise money through a stock issue must have sounded good because it isn't as expensive as debt."

The preferred stock eventually will be converted to common stock at a rate and time to be determined.

Chrysler sells extra shares

Defying skeptics and critics, Chrysler Corp. last week succeeded in selling 15 percent more of its new stock than anticipated. It raised about $395 million for its anemic cash reserves after paying underwriting fees.

The company augmented an initial offering of 35 million common shares by selling an additional 5.25 million shares. Chrysler priced the new stock to the wholesale underwriters at $10.125 per share. The new shares join in the marketplace the 224.4 million Chrysler common shares outstanding before the offering.

Chrysler also put 27 million new shares worth an estimated $300 million into its underfunded pension plan.

The new stock dilutes previously outstanding shares, but Chrysler has said it needs to fortify its balance sheet and avoid a further downgrading of its credit rating, which now stands at junk-bond status.

— *Mary Connelly*

NHTSA fills No. 2 position

WASHINGTON — Frederick H. Grubbe, 30, has been appointed deputy administrator of the National Highway Traffic Safety Administration.

Grubbe has been acting deputy administrator since early this year. Before that he was special assistant to Transportation Secretary Samuel K. Skinner responsible for personnel appointments and organization management.

He replaces Jeffrey Miller, who resigned the agency's No. 2 position last winter.

U.S. AND CANADA CAR AND TRUCK PRODUCTION

Vehicles are domestic unless noted. Vehicles are cars unless noted.

	Est. 10/7-10/12/91	Actual 9/30-10/5/91	Sept. Total	Year 1/1-10/12/91	Year 1/1-10/13/90
LeBaron A	0	0	0	0	8,071
LeBaron J	200	209	294	19,452	42,284
New Yorker	700	600	448	6,402	31,136
Fifth Avenue	1,400	1,177	897	23,915	27,539
Imperial	300	277	1,238	6,833	15,175
Town & Country (trk.)	100	129	442	3,388	2,078
Total Chrysler	**2,700**	**2,392**	**3,319**	**59,990**	**126,303**
Horizon	0	0	0	0	4,327
Sundance	1,900	1,849	8,512	49,429	69,416
Acclaim	1,800	1,890	7,780	63,712	89,618
Voyager (trk.)	4,700	2,747	9,939	78,312	67,292
Voyager (Can. trk.)	2,341	2,580	10,535	86,725	78,754
Total Plymouth	**10,741**	**9,066**	**36,766**	**278,178**	**309,407**
Omni	0	0	0	0	4,078
Daytona	300	356	215	5,864	28,172
Shadow	1,950	1,939	8,521	54,594	77,328
Dynasty	2,000	2,262	16,678	95,207	93,608
Spirit	2,500	2,484	8,653	60,332	80,856
Monaco (Can.)	0	0	2,067	8,241	8,603
Caravan (trk.)	4,800	2,904	11,228	91,780	72,472
Caravan (Can. trk.)	3,541	3,673	13,951	113,869	97,717
Caravan C/V (trk.)	200	109	239	2,872	4,171
Caravan C/V (Can. trk.)	98	99	381	12,836	5,688
Dakota (trk.)	3,200	2,976	12,659	71,963	57,660
Ram pickups (trk.)	1,000	969	5,394	59,652	84,525
Ram Wagon (Can. trk.)	450	458	1,761	15,887	17,259
Ram Van (Can. trk.)	1,510	1,489	5,777	34,052	48,410
Total Dodge	**21,549**	**19,718**	**87,544**	**627,170**	**680,547**
Premier (Can.)	0	0	815	8,425	9,986
Cherokee (trk.)	4,300	4,324	19,197	116,009	125,487
Comanche (trk.)	100	106	529	4,152	7,194
Grand Wagoneer (trk.)	0	0	0	1,539	5,594
Wagoneer (trk.)	50	44	192	2,267	3,158
Wrangler (Can trk.)	1,272	1,619	6,418	48,967	46,092
Total Jeep-Eagle	**5,722**	**6,093**	**27,151**	**181,358**	**197,511**
Total U.S. car	**13,050**	**13,043**	**53,236**	**385,739**	**571,628**
Total Can. car	**0**	**0**	**2,902**	**16,666**	**18,589**
Total U.S. truck	**18,450**	**14,308**	**59,819**	**431,954**	**429,631**
Total Can. truck	**9,212**	**9,918**	**38,823**	**312,337**	**293,929**
CHRYSLER CORP.	**40,712**	**37,269**	**154,780**	**1,146,697**	**1,313,768**
Escort	0	5,867	16,880	160,402	192,710
Mustang	1,254	0	7,348	68,868	106,195
Tempo	0	3,030	12,345	88,916	104,999
Tempo (Can.)	3,116	0	9,773	84,990	91,937
Taurus	7,245	7,467	33,894	258,403	276,066
Thunderbird	0	0	8,033	58,334	94,156
Crown Victoria (Can.)	2,178	2,068	8,293	74,588	94,789
Aerostar (trk.)	3,946	3,944	18,873	137,391	169,532
Bronco (trk.)	717	702	2,843	14,827	40,939
Explorer/Bronco II (trk.)	6,618	6,394	27,745	217,889	155,651
Navajo (trk.)	232	231	985	9,448	5,192
Econoline (trk.)	4,415	3,196	9,997	109,103	149,577
Heavies (trk.)	0	1,017	2,060	25,566	41,238
Light trucks (trk.)	9,459	9,612	36,541	249,852	368,170
Light trucks (Can. trk.)	0	2,982	10,297	73,417	108,609
Ranger (trk.)	4,606	6,786	28,837	215,098	225,004
Total Ford Div.	**43,786**	**53,298**	**234,744**	**1,847,898**	**2,224,764**
Topaz	0	1,106	4,350	36,601	40,669
Topaz (Can.)	1,225	0	3,350	28,030	34,503
Cougar	0	0	4,062	44,822	63,348
Sable	3,203	2,955	8,345	83,184	84,874
Grnd Marquis (Can.)	2,622	3,251	12,337	83,483	87,806
Total Mercury	**7,050**	**7,312**	**32,444**	**276,120**	**310,600**
Continental	1,187	1,188	4,726	44,261	47,553
Mark VII	207	204	829	7,761	16,103
Town Car	2,782	2,797	11,095	104,100	119,764
Total Lincoln	**4,176**	**4,189**	**16,650**	**156,122**	**183,420**
Total L-M Div.	**11,226**	**11,501**	**49,094**	**432,242**	**494,020**
Total U.S. car	**15,878**	**24,614**	**111,907**	**955,651**	**1,145,837**
Total Can. car	**9,141**	**5,319**	**33,753**	**271,091**	**309,035**
Total U.S. truck	**29,993**	**31,882**	**127,881**	**979,173**	**1,155,303**
Total Can. truck	**0**	**2,982**	**10,257**	**73,417**	**108,609**
FORD MOTOR CO.	**55,012**	**64,797**	**283,838**	**2,279,332**	**2,718,784**
Skylark	1,760	1,497	3,831	7,442	73,250
Century	2,339	2,355	10,921	75,790	53,326
Regal (Can.)	2,800	2,837	13,737	98,430	77,613
Riviera	376	256	848	39,048	17,784
Park Avenue/Electra	1,766	1,848	6,279	37,595	45,574
LeSabre	3,810	3,568	15,348	83,655	128,579
Roadmaster Sedan*	1,288	1,131	5,423	53,610	0
Roadmaster Wagon†	320	313	1,160	19,475	4,022
Reatta	0	0	0	1,205	5,277
Total Buick	**14,459**	**13,905**	**57,547**	**416,258**	**405,427**
Eldorado	776	570	1,240	9,646	17,091
Seville	842	569	2,311	18,588	27,649
Brougham	552	519	2,631	16,665	25,628
DeVille	3,718	3,669	14,767	123,828	129,088
Allante	64	64	255	2,378	3,025
Total Cadillac	**5,952**	**5,391**	**21,204**	**171,106**	**202,481**
Cavalier	6,211	5,115	21,601	199,368	271,690
Camaro	1,399	1,395	5,476	42,926	60,492
Celebrity (Can.)	0	0	0	0	20,319
Corsica-Beretta	5,856	4,437	16,296	189,404	228,002
Lumina (Can.)	5,700	5,731	24,829	184,952	172,606
Caprice	2,440	2,476	11,139	106,036	181,868
Corvette	480	480	1,836	16,459	18,878
Astro (trk.)	2,404	2,412	12,132	77,089	103,939
Blazer (trk.)	76	19	29	5,663	13,603
Lumina APV (trk.)	2,091	1,792	7,246	36,684	69,357
Mediums (trk.)	0	0	575	1,436	6,818
P-Model (trk.)	0	0	1,800	15,607	17,306
Pickups (trk.)	6,703	5,635	26,491	228,869	340,030
Pickups (Can. trk.)	3,750	3,730	12,926	111,383	134,061
S10 (trk.)	5,434	5,866	22,032	201,171	190,046
S10 Blazer (trk.)	2,041	1,877	8,397	31,919	62,358
Sportsvan (trk.)	1,321	1,371	4,101	33,391	48,626
Sportsvan (Can. trk.)	1,610	1,606	4,123	41,472	39,900
Suburban (trk.)	153	66	87	21,327	54,523
Total Chevrolet	**47,669**	**44,008**	**181,216**	**1,545,173**	**2,034,424**
Calais	0	0	0	34,616	82,589
Cutlass Ciera	3,209	3,195	14,113	78,322	56,875
Cutlass Ciera (Can.)	0	0	0	41,161	61,254
Cutlass Supreme	2,700	2,659	10,174	83,512	75,307
Toronado	222	150	507	4,062	12,426
88	2,749	2,652	12,343	68,467	83,038
Custom Cruiser Wag.††	160	159	595	6,886	1,223
98	1,482	1,472	5,880	62,241	36,392
Silhouette (trk.)	587	464	1,530	16,018	25,773
Bravada (trk.)	163	196	948	11,669	0
Total Oldsmobile	**11,272**	**10,947**	**46,090**	**406,956**	**435,177**
Sunbird	2,842	2,426	10,879	93,177	129,117
Grand Am	4,401	3,283	5,590	99,844	171,707
Firebird	601	605	2,570	16,352	35,652
Grand Prix	3,363	3,314	10,434	85,934	97,204
Pontiac 6000	0	0	0	19,939	44,461
Bonneville	2,985	3,432	9,494	60,851	63,163
Trans Sport (trk.)	1,307	1,092	4,004	23,020	37,625
Total Pontiac	**15,499**	**14,152**	**42,971**	**399,117**	**578,929**
Jimmy (trk.)	25	6	26	1,625	4,137
Mediums (trk.)	0	0	1,232	3,037	6,606
P-Model (trk.)	0	0	122	1,939	2,305
Pickups (trk.)	2,302	1,749	8,919	94,799	120,287
Pickups (Can. trk.)	875	883	4,518	40,773	49,785
Sonoma (trk.)	1,074	1,167	5,102	46,944	42,043
S15 Jimmy (trk.)	676	798	3,471	11,539	20,759
Safari (trk.)	804	999	3,655	31,357	36,325
Suburban (trk.)	101	20	74	17,135	26,614
Vandura (trk.)	566	507	1,694	14,759	18,479
Vandura (Can. trk.)	500	504	1,717	17,466	16,018
Total GMC	**6,923**	**6,633**	**30,530**	**281,373**	**343,360**
Total Saturn*	**3,650**	**3,650**	**12,258**	**71,405**	**1,875**
Total U.S. car	**62,361**	**57,259**	**216,199**	**1,828,727**	**2,182,554**
Total Can. car	**8,500**	**8,568**	**38,566**	**324,542**	**331,794**
Total U.S. truck	**27,828**	**26,036**	**113,767**	**927,015**	**1,247,561**
Total Can. truck	**6,735**	**6,723**	**23,284**	**211,094**	**239,764**
GENERAL MOTORS	**105,424**	**98,586**	**391,816**	**3,291,379**	**4,001,673**
Can. car	2,400	2,467	9,103	81,216	8,500
Can. trk.	1,550	1,585	4,952	40,205	6,500
CAMI*	**3,950**	**4,052**	**14,055**	**126,421**	**15,000**
DIAMOND-STAR*	**3,357**	**2,690**	**12,635**	**119,908**	**118,452**
Civic	910	350	2,663	64,148	85,865
Civic (Can.)	2,106	2,210	8,799	84,232	81,702
Accord	8,190	8,415	32,528	291,979	259,715
Total U.S. car	**9,100**	**8,765**	**35,191**	**356,127**	**345,580**
Total Can. car	**2,106**	**2,210**	**8,799**	**84,232**	**81,702**
HONDA	**11,206**	**10,975**	**43,990**	**440,359**	**427,282**
HYUNDAI Sonata (Can.)	**890**	**821**	**1,579**	**20,273**	**18,223**
MAZDA*	**4,832**	**3,936**	**16,382**	**128,381**	**140,410**
U.S. trk.	1,000	1,555	3,498	51,965	58,340
Can. trk.	165	165	626	5,618	7,127
NAVISTAR*	**1,165**	**1,720**	**4,124**	**57,583**	**65,467**
Sentra	2,860	3,381	10,847	105,117	69,425
Pickup (trk.)	2,774	3,347	10,874	103,949	111,835
NISSAN	**5,634**	**6,728**	**21,721**	**209,065**	**181,260**
Geo Prizm	1,850	1,855	7,034	72,054	79,049
Toyota Corolla	2,450	2,422	9,034	82,049	80,171
Toyota Hilux (trk.)	100	108	204	411	0
NUMMI	**4,400**	**4,385**	**16,272**	**154,514**	**159,220**
Legacy	1,280	1,289	5,012	45,384	23,425
Pickup (trk.)	594	559	2,268	20,710	0
Rodeo (trk.)	851	794	3,015	22,629	0
Total U.S. car	**1,280**	**1,289**	**5,012**	**45,384**	**23,425**
Total U.S. trk.	**1,445**	**1,353**	**5,283**	**43,339**	**26,125**
SUBARU-ISUZU	**2,725**	**2,642**	**10,295**	**88,724**	**49,550**
Camry	3,270	2,389	3,137	144,238	173,740
Corolla (Can.)	1,450	1,439	5,537	51,871	47,416
TOYOTA	**4,720**	**3,828**	**8,674**	**196,109**	**221,156**
VOLVO 740,940 (Can.)*	**125**	**130**	**407**	**6,138**	**6,253**
AM GENERAL (trk.)	**400**	**400**	**1,920**	**16,290**	**17,640**
MISCELLANEOUS (trk.)**	**2,600**	**2,600**	**12,720**	**107,320**	**117,000**
Total U.S. car	**119,480**	**121,643**	**488,534**	**4,223,275**	**4,930,271**
Total Canada car	**24,412**	**29,754**	**100,646**	**861,029**	**821,512**
Total U.S.-Canada Car	**143,990**	**142,397**	**581,180**	**5,084,305**	**5,751,783**
Total U.S. truck	**84,590**	**81,590**	**355,986**	**2,961,416**	**3,164,035**
Total Canada truck	**17,662**	**21,373**	**77,982**	**642,671**	**655,920**
Total U.S.-Canada truck	**102,252**	**102,962**	**413,948**	**3,304,088**	**3,819,955**
TOTAL U.S.	**204,070**	**203,232**	**816,520**	**6,884,692**	**8,094,306**
TOTAL CANADA	**42,074**	**42,127**	**178,628**	**1,503,701**	**1,477,432**
TOTAL U.S.-CANADA CAR & TRUCK	**246,152**	**245,359**	**995,128**	**8,388,392**	**9,571,738**

*Estimate †1990 totals reflect LeSabre (rwd) ††1990 totals reflect Olds. 88 (rwd)

*CAMI includes Geo Metro and Suzuki Swift cars and Geo Tracker and Suzuki Sidekick trucks; Diamond-Star includes Eagle Summit and Talon, Mitsubishi Eclipse and Mirage and Plymouth Laser; Mazda includes MX-6, 626 and Ford Probe.

**Estimates for Mack, Volvo-White, Kenworth, Peterbilt, Freightliner, Mercedes-Benz.

May contain error of one or two units due to rounding.

Output in Sept. tops '90

ROBIN-LYN RAIMEY
Special Correspondent

Total September vehicle production in the United States and Canada edged ahead of the total for September 1990 — the first time this year that monthly output has surpassed the corresponding month last year.

September's total of 995,128 was 1,272 units above the September figure in 1990.

Truck production made the difference. September U.S. truck output of 335,996 was up 4.7 percent, and Canadian truck output of 77,982 was up 32.1 percent.

Canadian car production in September was the highest since 1969. Output of 100,646 cars last month was 23.0 percent more than September 1990 output.

On the U.S. side of the border, it was a different story. September car production of 480,534 was the lowest total for the month since 1982 and was off 9.7 percent from September 1990.

Total car and truck production in Canada and the United States last week was 246,152, up 0.3 percent from the previous week and down 6.1 percent from the 1990 week.

Third-quarter vehicle production of 2,538,422, was off 14.6 percent from the second-quarter and down 6.7 percent from third-quarter production last year.

General Motors' Buick-Oldsmobile-Cadillac Group scheduled two overtime shifts last Saturday at the Lordstown, Ohio, car and truck plants and the Wilmington, Del., car plant. Lordstown makes the Pontiac Sunbird, Chevrolet Cavalier and Chevrolet and GMC full-sized vans, and Wilmington makes the Corsica and Beretta.

The Chevrolet-Pontiac-Canada Group scheduled one shift of Saturday overtime at Tarrytown, N.Y., source of the Chevrolet Lumina APV, Oldsmobile Silhouette and Pontiac Trans Sport.

GMC Truck Division scheduled two Saturday shifts at the Shreveport, La., truck plant, which makes the GMC Sonoma, and S15 Jimmy and the Chevrolet S10 pickup and Blazer; and one shift at the Moraine, Ohio, truck plant for the postal line.

GM of Canada scheduled one shift of Saturday overtime for all plants.

Ford Motor Co. worked daily overtime at the truck plants in Kansas City, Mo., Lorain, Ohio, and Louisville, Ky. Kansas City makes Ford's F-series pickups; Lorain produces the Econoline and Club Wagon, and Louisville produces the Explorer, Ranger and Mazda Navajo.

Chrysler Corp. scheduled daily overtime and two Saturday overtime shifts at the Dodge City Plant in Warren, Mich, which produces the Dodge Dakota and full-sized pickups.

All Canadian car and truck plants will be closed today in observance of the Canadian Thanksgiving holiday.

NOTE

ONLY THE FOLLOWING PAGES OF THIS

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